

1895

Catalogue
of
Photographie
Apparatus

Rochester Optical Co.,
Rochester, N.Y.

TO OUR CUSTOMERS.

We invite a careful and critical examination of this our Annual Catalogue of Photographic Apparatus and Materials, which we have the pleasure to offer.

Our goods are guaranteed to be, in every particular, exactly as represented.

Our prices will always be found as low as possible for the class of goods.

We employ only skilled workmen, the most of whom have been with us for several years; we use nothing but selected materials, and as all our apparatus is made under our personal supervision, we can say without hesitation that our goods are unequaled for durability, workmanship, accuracy and excellence of finish.

We are progressive, and improve our apparatus when found practicable, as we avail ourselves of every desirable modification of apparatus. Should these changes cause a slight departure from the printed description, it will be for the better, thus adding to the cost of production, which we voluntarily assume for the benefit of our customers.

TERMS.

Prices given are net, no charge for boxing or cartage.

We prefer that remittances be made by Draft on New York, Post Office Money Order, Express or Registered Letter. If check is sent fifteen cents must be added for cost of exchange.

Persons unknown to us, desiring goods sent C. O. D., must remit one-quarter the cost with the order. The goods will then be sent by express, with the privilege of inspection; should the goods not be kept we will return the amount of remittance, less express charges.

Orders for shipment by freight must be accompanied by full amount of invoice.

We pack all goods with the utmost care, and will guarantee their safe arrival when sent by freight or express.

Small parcels, which do not contain glass, can be sent by mail if desired, but *must be sent at risk of purchaser*. In ordering goods sent by mail, postage *must be enclosed*; otherwise goods will be sent by express.

In ordering goods, please state how to ship. Should this be omitted we will use our own discretion.

Descriptive Catalogue

AND

• Price List •

OF THE

Photographic Apparatus,

MANUFACTURED BY

Rochester Optical Company,

W. F. CARLTON,

PROPRIETOR AND MANAGER.

... SPECIALTY: ...

View Cameras for Amateurs and Professionals.

ROCHESTER, N. Y.

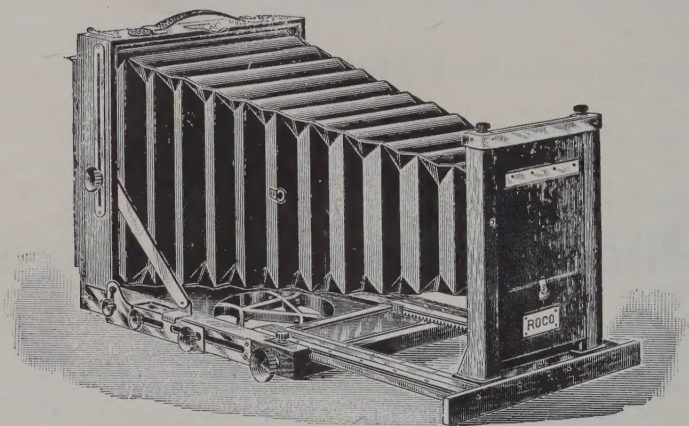
ROCHESTER OPTICAL COMPANY,

39 TO 49 SOUTH STREET.

MAY, 1895.

The Carlton Camera.

REVERSIBLE BACK.



The CARLTON CAMERA, is, without question one of the finest Cameras yet placed on the American market.

The great popularity achieved by the Universal Camera throughout the United States and Canada, led us to believe that the Carlton, with its additional features, would meet with a reception even more cordial than that given the Universal, and we have not misjudged the result.

When the Universal Camera was introduced, improvement seemed almost impossible. We are progressive, however. Experience suggests new ideas and methods, and we believe in embodying them in our apparatus.

For the enthusiastic amateur and professional photographer who believes in having the very best of everything, the Carlton, with its manifold features, adapting it to an almost infinite variety of work, will be found to fully meet their views as the Camera *par excellence*.

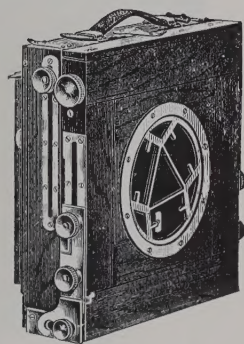
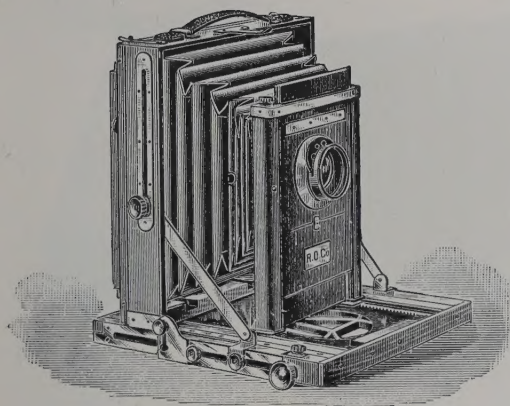
The Carlton is made on the same pattern as the Universal, and the description of the latter will apply equally well to the former.

Forward Movement of Camera-Back.—When lenses of extreme width of angle are employed on the compact form of camera, it sometimes happens that a portion of the bed is included in the picture. To prevent this, the back of the Carlton can be moved forward, thus allowing the focus to be obtained with the lens entirely out of range of the bed. This movement is quickly made by the use of two milled heads, which, when loosened, permit the back to be placed above the bed, in which position it can be moved forward.

Of course this improvement is only required with lenses of shortest focus, or "extreme angle," as the ordinary wide angle lens can be used without it.

The Carlton Camera.

REVERSIBLE BACK.



No Loose Top for Tripod.—The bed of the Carlton carries its own Tripod top, adapted to the Rochester Optical Co.'s Combination Tripod. The Top, made of metal, is neatly fitted in the bed and revolves easily and with great smoothness, permitting the operator to adjust the Camera in any direction. A small milled head secures it firmly in position.

All Carlton Cameras have double swing back. The dimensions are the same as given for the Universal.

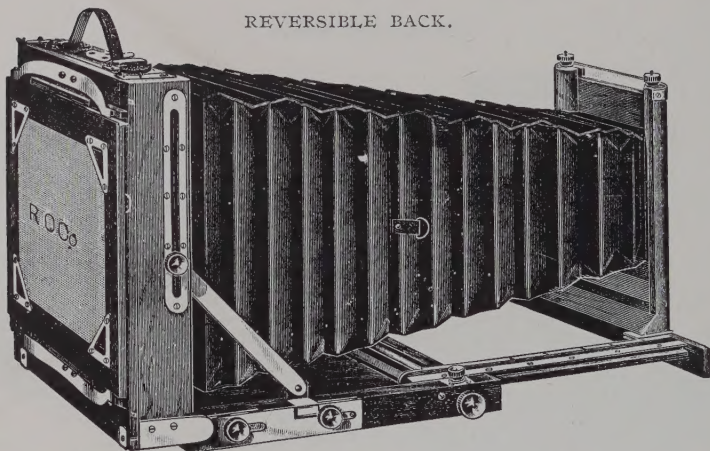
The price includes one Mahogany Perfection Holder, with rubber slides; Mahogany Combination Tripod and Canvas Case, but no lens.

The Carlton Cameras, in sizes to 8 x 10 inclusive, are furnished with either a short or long canvas case. The former carries the camera and three holders only; the latter will hold the camera, six holders, Combination Tripod, and in sizes to 6½ x 8½ inclusive, there is a compartment for lenses. In ordering, specify style of case desired.

Size of View.	Focal Capacity.	Weight of Camera.	Double Swing.
4 x 5	13 in.	2 7/8 lbs.	\$35 00
4 1/4 x 6 1/2.	15 1/2 "	4 "	36 00
5 x 7	17 "	4 7/8 "	40 00
5 x 8	19 "	5 3/4 "	42 00
6 1/2 x 8 1/2	20 1/2 "	7 "	45 00
8 x 10	24 "	9 1/4 "	50 00
10 x 12	26 3/4 "	12 3/4 "	55 00
11 x 14	30 3/4 "	15 1/4 "	62 00

The Universal Camera.

REVERSIBLE BACK.



DOUBLE SWING UNIVERSAL, FULLY EXTENDED.

The UNIVERSAL CAMERA is a modified English pattern and is the most compact camera in market, the 5 x 8 being but $2\frac{3}{4}$ inches thick when folded and weighs but $4\frac{3}{4}$ pounds.

It has extra long bellows, the 5 x 8 having a focal capacity of 19 inches and other sizes in proportion; this allows the use of lenses of extreme length of focus, while wide angle lenses can also be used. Owing to the extra length of bellows the camera can be used for copying and enlarging, if desired, and in fact is as near a *universal* camera as can well be made.

The Universal is made from selected mahogany, finished in the best possible style, and has all latest improvements. We have spared no pains to make every working point as near perfection as possible.

The camera-box is square, the back being reversible, so that when a view is wanted either horizontally or vertically on the plate, the change can be effected in *five-seconds* by simply reversing the back instead of the entire camera-box.

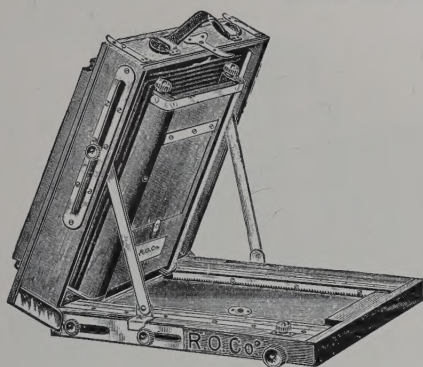
The ground-glass frame is held to the camera-back by two springs which allow it to recede so as to insert the holder between the ground-glass and camera-back.

By this method the ground-glass is not at all liable to breakage besides being a most convenient method of applying the plate-holder to the camera.

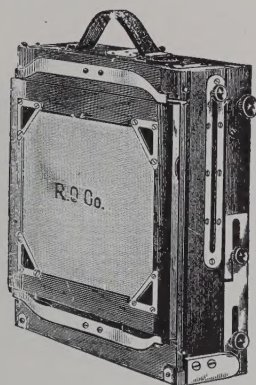
While very compact the Universal is simple of manipulation, there being no loose screws or parts. It is set up by tightening four milled heads and is folded again by loosening the same number.

The Universal Camera.

REVERSIBLE BACK.



PARTIALLY FOLDED.



FOLDED.

The UNIVERSAL is made with both single and double swing, has swinging front and rising and falling front controlled by a spring acting in a ratchet, doing away with milled heads. The forward end of bellows is attached to the movable front and slides with it, thus avoiding a possibility of cutting off the rays of light.

It has fine rack and pinion, the movements being perfectly smooth. All metal work is of brass, polished and lacquered.

The Universal is provided with a leather handle, so that it may be carried without the case if desired, as one holder can be carried between the ground-glass and camera-back.

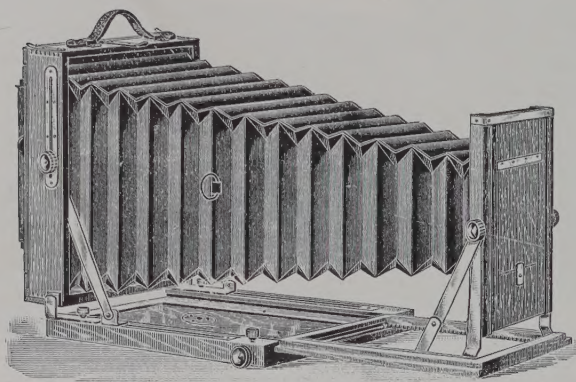
Price includes Canvas Carrying Case, one Perfection holder and Combination Tripod, but no lens. (With sizes above 11 x 14 we send English Book-Holder.)

Universal Cameras, up to and including 8 x 10, are supplied with either a short or long Canvas Case. The former carries the camera and three holders. The latter holds camera, six holders and Combination Tripod, and in sizes up to 6½ x 8½ inclusive, there is a space for lenses. In ordering, specify style of case desired.

Size of View.	Focal Capacity.	Weight of Camera.	Single Swing.	Double Swing.
3¼ x 4¼	11 in.	1¾ lbs.	\$27 00	\$29 00
4 x 5	13 "	2⅛ "	28 00	30 00
4¼ x 6½	15½ "	3⅓ "	30 00	32 00
5 x 7	17 "	3⅞ "	33 00	35 00
5 x 8	19 "	4¾ "	35 00	37 00
6½ x 8½	20¼ "	5¼ "	38 00	40 00
8 x 10	24 "	7½ "	40 00	43 00
10 x 12	26½ "	10¾ "	45 00	48 00
11 x 14	30¾ "	13¼ "	50 00	55 00
14 x 17	36 "	21½ "	64 00	70 00
17 x 20	43 "	34 "	75 00	85 00

The Monitor Camera.

REVERSIBLE BACK.



The MONITOR CAMERA, which we present this season for the first time, is a new form of the compact style of View Camera, and is similar in general appearance to the Carlton and Universal.

The Monitor has been especially designed with a view of making a strictly high grade compact camera, possessing all the latest improvements, and yet at a lower price than the Universal.

The Monitor is made with the same care as the Carlton and Universal, and it is in every respect equally well made. It is made of the best mahogany, highly polished, and the brass work is polished and lacquered. The bellows is of finest leather, so that the camera presents an exceedingly handsome appearance.

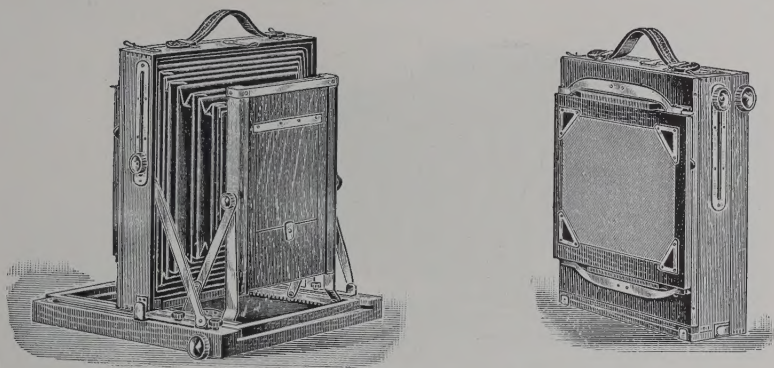
It has extra long draw, thus allowing the use of lenses of extreme length of focus, while the back will slide forward by loosening two milled heads, so that extreme wide angle lenses can be used.

The Monitor has double-swing back, rising and falling front, and is fitted with rack and pinion, the movement being perfectly smooth. The rising and falling front is controlled by a spring working in a ratchet, doing away with milled heads.

The back of the Monitor is square, and may be quickly reversed for either vertical or horizontal pictures. The ground-glass is spring actuated, and recedes for the insertion of the plate holder, which slides between the ground-glass frame and the back of the camera.

The Monitor Camera.

REVERSIBLE BACK.



The MONITOR is exceedingly compact and light in weight, and yet is very simple of manipulation, and but two milled heads are tightened in setting up, as the front of the camera is locked automatically in position when raised.

The Perfection Jr. Plate Holder is used with the Monitor, and is a feature of the outfit. This holder is the same as fitted to the Premo Camera, and is conceded to be the best holder in market and is the most compact.

The Monitor is provided with a leather handle, so that it may be carried without the case if desired, as one holder can be carried between the ground-glass and camera back.

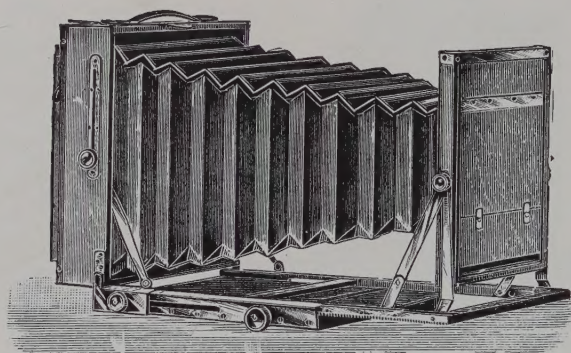
Price includes Canvas Carrying Case, one Perfection Jr. Holder and Combination Tripod, but no lens.

Monitor Cameras, up to and including 8 x 10, are supplied with either a short or long Canvas Case. The former carries the camera and three holders. The latter holds camera, six holders and Combination Tripod, and in sizes up to 6½ x 8½ inclusive, there is a space for lenses. In ordering, specify style of case desired.

Size of View.	Focal Capacity.	Weight of Camera.	Double Swing.
4 x 5	13 in.	2 lbs.	\$24 00
5 x 7	17 "	3½ "	27 00
5 x 8	19 "	4¼ "	30 00
6½ x 8½	20¼ "	4⅝ "	33 00
8 x 10	24 "	6¾ "	36 00
10 x 12	26½ "	9½ "	40 00
11 x 14	30¾ "	12 "	45 00

The Kenwood Camera.

REVERSIBLE BACK.



The KENWOOD CAMERA is another new form of the compact camera, its especial feature being the wide front for stereoscopic work. It is the only Camera in the market of the compact pattern with which Stereo Lenses can be used.

The Kenwood is very compact, the $6\frac{1}{2}$ x $8\frac{1}{2}$ measuring but $3\frac{1}{4}$ inches thick, when closed, and weighs only 6 pounds. It has extra length of draw, same as the Universal and Monitor, for very long focus lenses; and can be closed for work with extremely short focus lenses, as the back will slide forward on the bed, same as the Monitor, by loosening one milled head on either side of the bed.

The Kenwood is made from selected mahogany, highly polished. The metal work is of brass, polished and lacquered. The bellows is made of dark red leather of finest quality, presenting an exceedingly handsome appearance.

The back of the Kenwood is square and may be quickly reversed for upright or horizontal pictures. The ground-glass screen is spring actuated, and recedes for the insertion of the plate-holder.

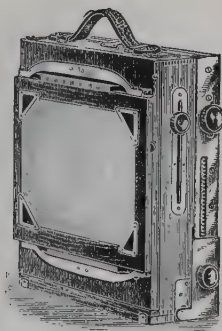
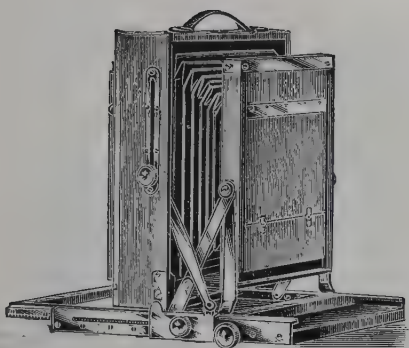
The Kenwood has double swing, rising and falling front, and fine rack and pinion, the movement being perfectly smooth.

The rising and falling front is held by a spring, working in a ratchet, avoiding the necessity of milled heads.

The Kenwood is easily manipulated, as it requires the adjustment of only two milled heads, when setting up. The front locks automatically in position, the same as the Monitor.

The Kenwood Camera.

REVERSIBLE BACK.



We have spared no pains or expense to make this camera a perfect instrument for all around work and we feel confident that the result will be fully appreciated by our friends, who desire to make the beautiful stereo views.

The Kenwood Camera is furnished with Perfection Jr. plate holder fitted with rubber slides. This holder is the same as supplied with the Premo Camera, and is a feature of the outfit. The Perfection Jr. is conceded to be the simplest and best holder ever made.

A leather handle is provided for lifting the camera from the case, or it may be carried without the case with one holder in position between the ground-glass and camera back.

Kenwood Cameras are supplied with either a short or long canvas case. The former holds the camera and three plate holders. The latter holds the camera with six plate holders and Combination Tripod, leaving a pocket at the end for lenses. In ordering specify which style of case is desired.

Price includes Canvas Carrying case, one Perfection Jr. plate holder and Combination Tripod, but no lens.

Size of View.	Focal Capacity.	Weight of Camera.	Double Swing.
5 x 7	17 in.	4½ lbs.	\$30 00
5 x 8	19 "	5¼ "	33 00
6½ x 8½	20¼ "	6 "	36 00
8 x 10	24 "	8¼ "	40 00

The Ideal Camera.

REVERSIBLE BACK.

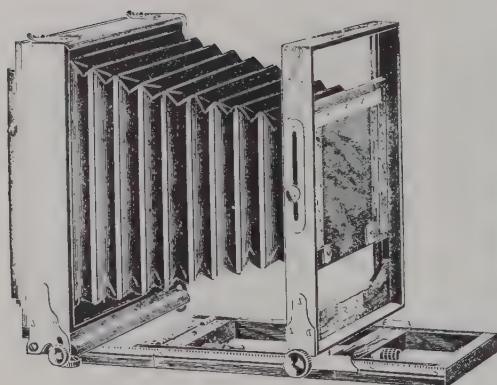


FIG. 1.



FIG. 2.

The IDEAL CAMERA is pronounced by all to be one of the best view cameras ever placed on the market. It is the result of much study and many experiments, made with a view of producing an instrument combining all the qualities required in a View Camera for the professional or amateur photographer.

It is made of selected mahogany, finished in the best possible style, every part being as near perfect as possible. All metal parts are made of brass, polished and lacquered.

The Ideal has reversible back, same as the Universal, with our spring-acting ground-glass frame by which the plate-holder is inserted between the ground-glass and camera-back.

It has fine rack and pinion focusing movement, the front moving forward leaving the back always stationary. When the focus has been obtained, the front is clamped by turning an independent milled head placed inside the one which turns the pinion.

As shown in the cut, the bellows are cone shaped, though 5 x 7 and above are made with front wide enough for stereoscopic work.

Our method of applying the horizontal swing is very simple, and it takes no additional room, so that the double swing Ideal is no less compact than the single swing.

The bed is in two sections, as, with a lens of short focus, the extra length is not required and can be removed.

The Ideal Camera.

REVERSIBLE BACK.

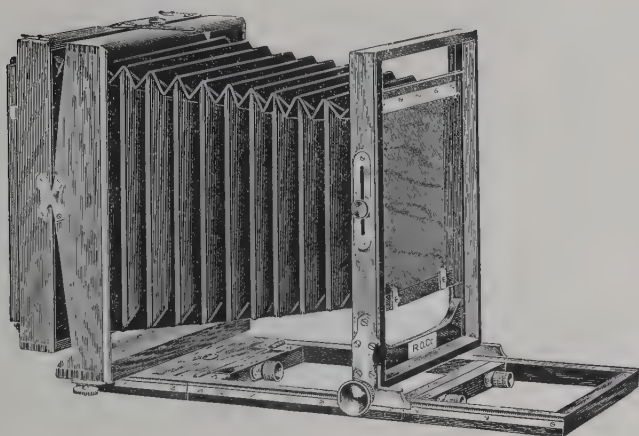


FIG. 3. (8 x 10.)

Taken in its entirety we can recommend the IDEAL to both the professional and amateur photographer.

Sizes up to and including $6\frac{1}{2} \times 8\frac{1}{2}$ are made same as Fig. 1, while 8×10 to 11×14 , inclusive, are made same as Fig. 3.

We make 14×17 , and larger, with back focus and with focusing handle, instead of rack and pinion.

Price includes one Perfection Plate-holder and Canvas Carrying Case, but no lens or tripod.

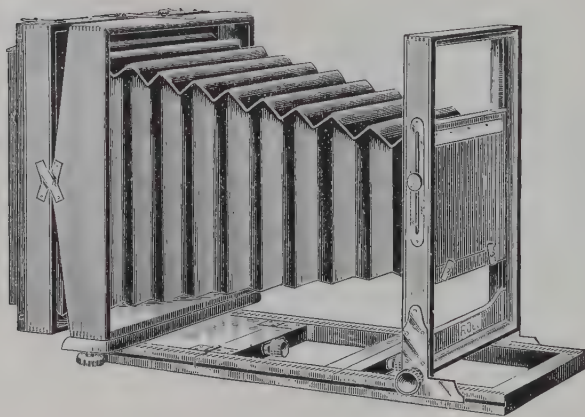
The Carrying Case will hold two extra plate-holders.

With sizes above 11×14 we send English Book-Holders.

Size of View.	Focal Capacity.	Weight of Camera.	Single Swing.	Double Swing.
$3\frac{1}{4} \times 4\frac{1}{4}$	$9\frac{1}{4}$ in.	2 lbs.	\$17 00	\$ 19 00
4×5	10 "	$2\frac{1}{2}$ "	18 00	20 00
$4\frac{1}{4} \times 6\frac{1}{2}$	$11\frac{3}{4}$ "	3 "	20 00	22 00
5×7	$13\frac{1}{2}$ "	$4\frac{1}{2}$ "	22 00	24 00
5×8	$14\frac{1}{4}$ "	$4\frac{3}{4}$ "	24 00	26 00
$6\frac{1}{2} \times 8\frac{1}{2}$	$14\frac{5}{8}$ "	$5\frac{1}{4}$ "	26 00	28 00
8×10	$21\frac{1}{4}$ "	8 "	30 00	33 00
10×12	$23\frac{1}{4}$ "	9 "	33 00	36 00
11×14	$24\frac{3}{4}$ "	12 "	38 00	42 00
14×17	29 "	$23\frac{3}{4}$ "	50 00	55 00
17×20	37 "	30 "	60 00	68 00
18×22	39 "	38 "	72 00	80 00
20×24	41 "	46 "	90 00	100 00

The Empire State Camera.

REVERSIBLE BACK.



To meet a constantly growing demand, especially among our professional friends, for a well made and thoroughly serviceable camera, possessing all the adjustments requisite for general work, and yet at a moderate price, we have introduced the "EMPIRE STATE."

This camera is constructed, not so much with the idea of beauty and fine finish in mind, but rather to combine in a complete and practical manner, all the movements necessary in a camera for both in-door and out-door photography.

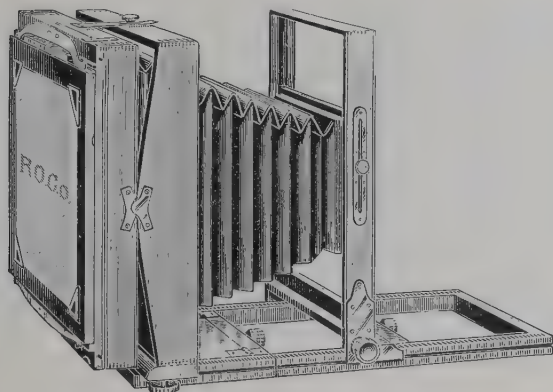
The Empire State is made of selected mahogany, and its trimmings are of polished brass. It has forward focus with fine rack and pinion adjustment, the front being held perfectly rigid by turning a milled head placed inside of the one turning the pinion.

The bed is made to hinge, and fold completely under the camera, thus allowing lenses of extremely short focus to be used. Ample rise and fall is given to the front, a desirable feature for work in confined situations. The front board is made wide enough for stereo lenses.

The Empire State is made both single and double swing. Unlike most of the moderate priced cameras, both swings are from the center, a feature that every professional will quickly recognize and appreciate.

The Empire State Camera.

REVERSIBLE BACK.



The horizontal swing is attached in a very simple manner, occupying no additional room, hence the double swing is no less compact than the single swing camera.

The back is reversible, and has our spring actuated ground-glass frame. The holder is inserted between the ground-glass and camera back. When in position the slide may be drawn from the top, bottom, or either side as desired.

In recommending the EMPIRE STATE as a thoroughly practical camera in every particular, we feel that our claims will be even more than justified by an examination of the instrument itself, the price in no way conveying an idea of its merits.

Price includes Canvas Carrying Case and one Perfection Holder, but no lens or tripod.

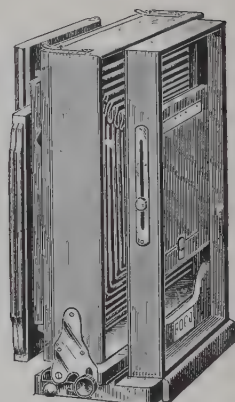
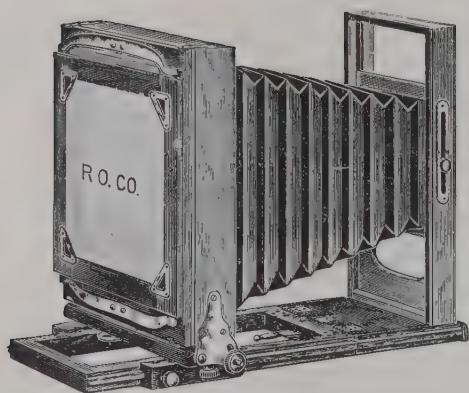
With sizes above 11 x 14 we send English Book-Holder.

The Carrying Case will hold two extra plate-holders.

Size of View.	Focal Capacity.	Weight of Camera.	Single Swing.	Double Swing.
5 x 7	15 $\frac{1}{4}$ in.	5 lbs.	\$17 00	\$19 00
5 x 8	16 "	5 $\frac{1}{2}$ "	18 00	20 00
6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	16 $\frac{1}{4}$ "	5 $\frac{3}{4}$ "	20 00	22 00
8 x 10	19 "	7 $\frac{3}{4}$ "	22 00	24 00
10 x 12	21 "	8 $\frac{3}{4}$ "	28 00	30 00
11 x 14	23 $\frac{1}{2}$ "	11 $\frac{1}{2}$ "	32 00	36 00
14 x 17	29 "	23 $\frac{3}{4}$ "	40 00	45 00
17 x 20	37 "	30 "	48 00	54 00
18 x 22	39 "	38 "	60 00	68 00
20 x 24	41 "	46 "	78 00	87 00

The Standard Camera.

REVERSIBLE BACK.



The STANDARD CAMERA is made on the same general style as the Empire State, though with back focus and without rack and pinion.

Though low in price the Standard is thoroughly well made of seasoned mahogany, finely finished in shellac; the metal work is of polished and lacquered brass, and as much pains are taken with the working parts as with the higher priced cameras.

The Standard has reversible back fitted with our spring-acting ground-glass frame, same as the Ideal and Universal. It is furnished with the Perfection Plate-Holder, and the slide may be drawn from the top or either side,—a great convenience when working in confined situations.

The horizontal swing is attached in a manner similar to the Empire State and occupies no additional room.

For those desiring a thoroughly serviceable camera with all the important adjustments, yet at a moderate outlay, we commend the Standard.

The price includes Canvas Carrying Case and one Perfection Holder, but no lens or tripod.

The Carrying Case will hold two extra plate-holders.

Size of View	Focal Capacity.	Weight of Camera.	Single Swing.	Double Swing.
3 $\frac{1}{4}$ x 4 $\frac{1}{4}$	9 $\frac{1}{2}$ in.	1 $\frac{5}{8}$ lbs.	\$10 00	\$12 00
4 x 5	10 $\frac{1}{2}$ "	2 "	10 00	12 00
4 $\frac{1}{4}$ x 6 $\frac{1}{2}$	12 "	2 $\frac{5}{8}$ "	12 00	14 00
5 x 7	13 "	3 $\frac{1}{4}$ "	12 00	14 00
5 x 8	13 $\frac{1}{2}$ "	3 $\frac{3}{8}$ "	14 00	16 00
6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	14 $\frac{1}{2}$ "	4 $\frac{1}{8}$ "	16 00	18 00
8 x 10	16 $\frac{1}{2}$ "	5 $\frac{1}{4}$ "	18 00	20 00

New Model Improved Camera.

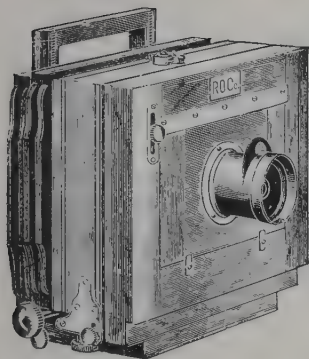


FIG. 1.

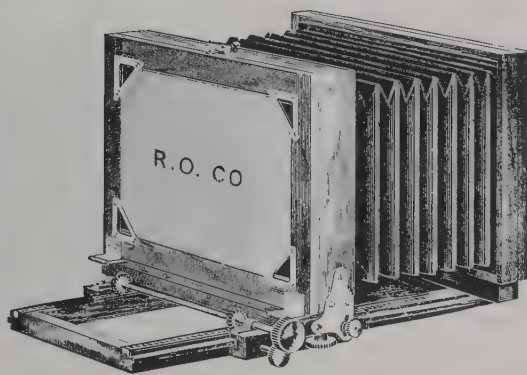


FIG. 2.

The NEW MODEL IMPROVED is made after the general style of the New Model. It has enjoyed the reputation for the past ten years of being the most popular camera in market, and deservedly so, it being the only strictly first-class camera made at a price within the reach of the ordinary amateur, and is conceded to be the best camera for the price to be found in market.

It is very light and compact, which, together with its handsome appearance, makes it a very desirable instrument for those who want a good camera but do not care to invest in a high-priced outfit.

The New Model Improved is made of the best Honduras mahogany, highly polished, with nickel trimmings; it has sliding front, folding bed, and is reversible by means of our new adjustable reversing clamp.

It has rack and pinion focusing movement; the folding part of bed is held rigid by our new clamp-hook, the quickest, easiest and best device yet used for the purpose.

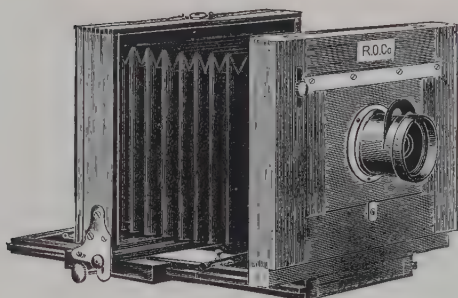
Price includes R. O. Co.'s Single View Lens, Carlton Sliding Tripod, Carrying Case and one Perfection Plate-Holder (except 8 x 10, where neither lens nor tripod are included).

The Carrying Case will hold two extra plate-holders.

Size of View.	Focal Capacity.	Weight of Camera.	Single Swing.	Double Swing.
3¼ x 4¼	8½ in.	15½ lbs.	\$13 00	\$15 00
4 x 5	9 "	13¼ "	14 00	16 00
4¼ x 6½	9½ "	21½ "	16 00	18 00
5 x 7	11¾ "	22½ "	18 00	20 00
5 x 8	12½ "	23¼ "	18 00	20 00
6½ x 8½	14 "	31¼ "	22 00	24 00
8 x 10	16 "	51½ "	*15 00	*17 00

* Not including Lens or Tripod.

New Model Camera.



The NEW MODEL CAMERA is well known, it having been on the market for ten years, and its popularity attests its merits. This camera shares with the New Model Improved the reputation of being the most popular camera in 'market for amateurs' use.

It is very light and compact, making a very desirable camera for the amateur who desires a good but cheap outfit.

The New Model is made of selected cherry, well finished, and with nickel trimmings. It is provided with sliding front, folding bed, and is easily reversed for upright pictures with our new adjustable reversing clamp, by which means the strain is entirely on the bed where it belongs.

The folding part of bed is held rigid by our new clamp-hook, the quickest, easiest, and most effective device yet used for the purpose.

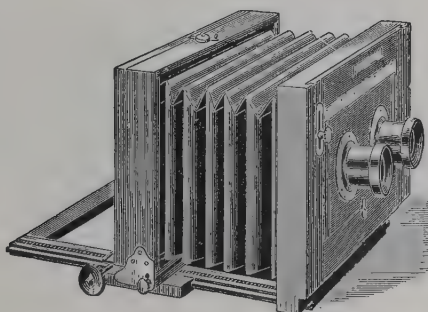
Price includes R. O. Co's Single View Lens, Standard Folding Tripod, Carrying Case and one Perfection Plate-Holder (except 8 x 10, where neither lens nor tripod are included).

The Carrying Case will hold two extra plate-holders.

Size of View.	Focal Capacity.	Weight of Camera.	Without Swing.	Single Swing.
3¼ x 4¼	8½ in.	1¾ lbs.	\$ 9 00	\$10 00
4 x 5	9 "	1⅝ "	9 00	10 00
4¼ x 6½	9½ "	2 "	10 00	11 00
5 x 7	11¾ "	2¼ "	11 00	12 00
5 x 8	12½ "	2½ "	11 00	12 00
6½ x 8½	14 "	2¾ "	13 00	15 00
8 x 10	16 "	5 "	*12 00	*14 00

* Not including Lens or Tripod

New Model Stereoscopic Camera.



The revival of the stereoscope necessarily creates a demand for a first-class Stereoscopic Camera. To meet this demand, we have devised the NEW MODEL STEREOSCOPIC CAMERA, believing it will find favor with all who are interested in this most fascinating branch of photography.

This Camera is the lightest, most compact and simplest instrument yet placed on the market, combining the many desirable features needed in a Stereo Camera. It is made from the best Honduras mahogany, highly polished, with nickel trimmings.

The New Model Stereoscopic Camera is patterned closely after the New Model Improved, having rack and pinion for focusing, sliding front, folding bed, and is reversible by means of our new adjustable reversing clamp. The folding bed is held rigid by a clamp-hook, which is the quickest, easiest and best device yet produced for the purpose.

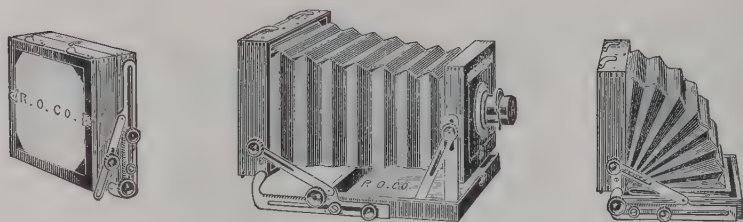
The partition and front board are removable so that the camera may be used, if desired, for other than stereoscopic pictures, by the addition of a lens of sufficient size to cover the full plate.

Each camera is enclosed in a neat canvas case, with room for two extra Perfection Holders.

Price for 5 x 8, with matched pair of No. 1 R. O. Co.'s View

Lenses, Carlton Sliding Tripod and one Perfection Holder, -	\$22 00
Complete without Lenses, - - - - -	16 00
Complete without Lenses or Tripod, - - - - -	14 00

Midget Pocket Camera.



The MIDGET POCKET CAMERA is the most compact camera ever made, being but $1\frac{1}{2}$ inches thick when folded. The $3\frac{1}{4} \times 4\frac{1}{4}$ can be carried in an ordinary coat pocket, while the 4×5 can be carried in an overcoat pocket. On account of its compactness it is invaluable for ladies, tourists, bicyclists and canoeists.

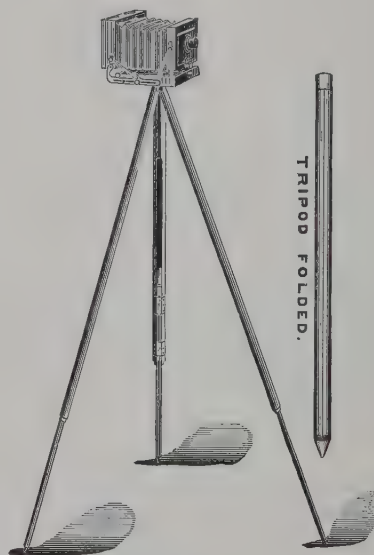
While so very compact, the $3\frac{1}{4} \times 4\frac{1}{4}$ camera has a focal length of $6\frac{1}{2}$ inches, while the 4×5 has $7\frac{1}{2}$ inches, so that any lens can be used if desired.

The Midget Pocket Camera is made in the best possible manner, of selected mahogany, highly polished, with metal work of polished and lacquered brass.

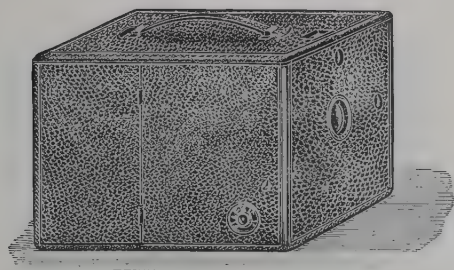
It has rising front, vertical swing and has fine rack and pinion focusing movement; the ground-glass is spring-acting, the holder sliding between it and the camera box.

The Lens is a rapid Rectilinear of great depth of focus and flatness of field, giving brilliant definition, and will cover the plate to the extreme corners, even with the shutter; the lens is made compact enough to remain attached to the lens board and be reversed in the camera when the camera is folded.

The lens is provided with rotating diaphragms and Star Shutter for instantaneous views; this shutter is the same as used on Premo and more fully described on page 27.



Midget Pocket Camera.



AS A DETECTIVE CAMERA.

The Tripod is an ingenious invention, it having the appearance of a cane when folded, and is very convenient. It is simply an extension tripod, each leg being one-third of a circle outside.

The size of the $3\frac{1}{4} \times 4\frac{1}{4}$ MIDGET when folded is $4 \times 5 \times 1\frac{1}{2}$ inches, and it weighs less than one pound.

In addition to its use as a very compact View Camera, we make the Midget into a hand or Detective Camera by enclosing it in a neat leather-covered box capable of carrying six holders with the camera.

The box is provided with a separate rack and pinion for focusing, the milled head being graduated for distances.

The change from a view Camera to a Detective Camera, or *vice versa*, is made in fifteen seconds.

The Midget is a Combination Camera of the highest order, and whether as a View or Detective Camera, it is not excelled.

We sell the Midget either complete or without the Detective feature as may be required.

Price includes Lens, Shutter, Tripod and *three* Holders.

$3\frac{1}{4} \times 4\frac{1}{4}$,	-	-	-	-	-	-	\$25 00
4 x 5,	-	-	-	-	-	-	25 00
$4\frac{1}{4} \times 6\frac{1}{2}$,	-	-	-	-	-	-	30 00
5 x 7,	-	-	-	-	-	-	32 00

If the Detective Camera feature is desired, add \$10 00.

Holdes for Midget Camera.

$3\frac{1}{4} \times 4\frac{1}{4}$ -	-	-	-	\$1 25	$4\frac{1}{4} \times 6\frac{1}{2}$ -	-	-	\$1 50
4 x 5 -	-	-	-	1 25	5 x 7 -	-	-	1 50
Cane Tripod for Midget,	-	-	-	-	-	-	-	4 50

The Premier.

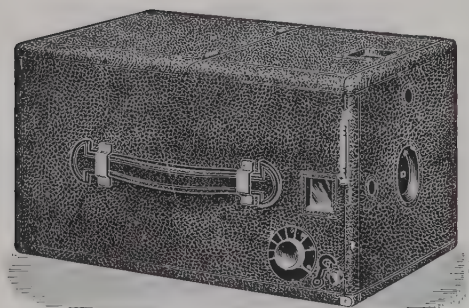


FIG. 1.

The PREMIER is conceded to be the best Hand Camera in the market for anywhere near the price, and possesses some advantages over all others.

The new Silent Shutter is a novel device. Its construction is such that it works without jar or noise. The speed may be regulated at the will of the operator, from a slow instantaneous movement to one of great rapidity, depending upon the tension exerted on the spring lever at the right hand side of camera.

Time exposures are made by simply extending the time stop, located above the spring lever. Press the press button to open shutter; close by pressing time stop. If preferred, the front of camera may be lowered, and the exposure made with the lens cap.

The letters U and D are plainly marked on the rubber leaves of the shutter, and indicate the position to be occupied by the spring lever when set for use, U signifying *up* and D *down*. In this manner the shutter always speaks for itself, and enables the operator to see at a glance whether it has been re-set after the last exposure. Another noticeable feature in the Premier Silent Shutter is the fact that in setting the shutter the leaves are not opened, an especial advantage when using a Roll Holder.

Two view finders and two tripod plates are supplied, for both vertical and horizontal pictures.

A ground-glass screen, the full size of the plate, is also provided, permitting the operator to use the Premier as a regular view camera after dropping the hinged panel in the back.

The focusing scale at the side is accurately marked with white figures on a black dial.

The Premier.

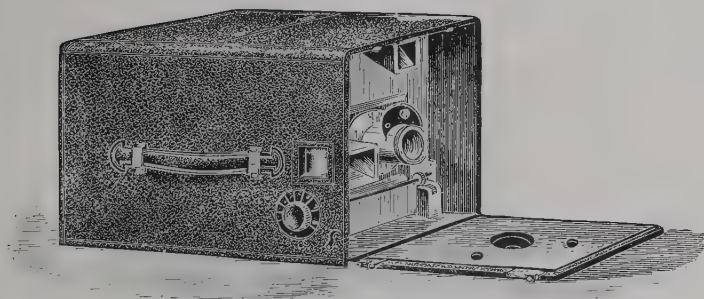


FIG. 2.

The PREMIER ground-glass screen is attached permanently to the camera-back, and *slides* easily on two brass supports into any desired position, thus obviating the annoyance caused by a removable screen, as supplied with most Hand Cameras.

The Single Lens furnished with the Premier is the well known R. O. Co.'s View Lens. The Rapid Rectilinear lens is made especially for this camera, and will be found excellent for general work, though at a very moderate price. Both lenses have rotating diaphragms. The Premier is so constructed that any other lens may be substituted if desired.

Glass Plates, Cut or Roll Films may all be used, as the Plate, Film and Roll Holders are interchangeable.

The Premier is made to hold either four or six plate-holders, the difference in length being $1\frac{1}{2}$ inches. Price is the same for either size. The camera for four holders measures only $6\frac{1}{2} \times 7\frac{1}{4} \times 11\frac{1}{2}$ inches and weighs but four pounds.

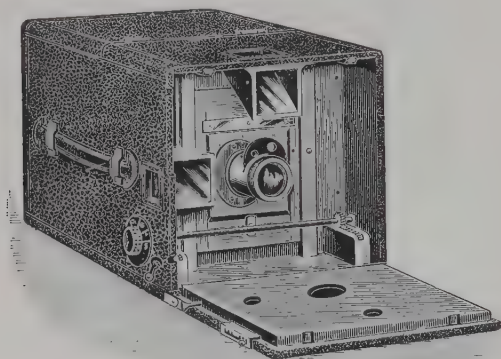
Black morocco leather is used in covering all Premiers, and a leather handle is attached for carrying, the camera presenting a very handsome appearance. Made only in 4×5 size.

PRICE.

							4 x 5
Premier, with one Plate-Holder,	-	-	-	-	-	-	\$15 00
With Rapid Rectilinear Lens,	-	-	-	-	-	-	21 00
Extra Premier Plate-Holders,	-	-	-	-	-	-	1 00
Facile Film-Holder (for cut films),	-	-	-	-	-	-	1 25
Roll Holder, empty,	-	-	-	-	-	-	8 00
Roll of Films, 24 exposures,	-	-	-	-	-	-	1 50
Roll of Films, 48 exposures,	-	-	-	-	-	-	3 00
Canvas Covered Case for Premier, with Shoulder Strap,	-	-	-	-	-	-	2 50
Leather " " " " " "	-	-	-	-	-	-	3 00

The Premier No. 2.

WITH SWING BACK, RISING AND FALLING FRONT.



The PREMIER NO. 2 is simply the regular Premier with Swing Back and Rising and Falling Front added. In all except these two features the description of the Premier on pages 20 and 21 applies to Premier No. 2, as does also price of holders and other accessories.

In adding the Swing Back and Rising and Falling Front, we have not increased the size nor added to the weight of the Premier and we desire to emphasize the fact that the outward appearance is identical with the regular Premier ; not until the lid is raised is any difference noted, and then only a small milled head is shown, which controls the swing. As the back swings from the *center*, the focus as indicated by the focusing dial, is not disturbed.

When the swing is not in use, the back is clamped in an upright position, as indicated by an automatic spring catch.

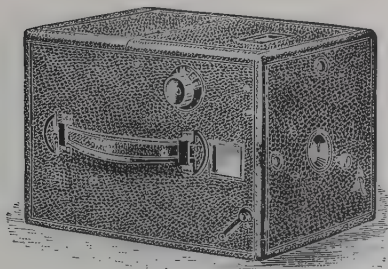
The Rising and Falling Front is regulated by a small press button placed at the side of the lens.

The Swing Back and Rising and Falling Front are used principally when using the camera on a tripod, and are of especial advantage in taking architectural subjects, and more especially tall buildings. A hand camera with these improvements possesses all the advantages of a regular tripod camera. Made only in 4 x 5 size.

PRICE.

Complete, with one Premier Plate-Holder,	-	-	-	4 x 5
With Rapid Rectilinear Lens,	-	-	-	\$18.00
	-	-	-	24.00

The Handy.



The HANDY, though sold at a low price, is thoroughly well made, light in weight, compact, and exceedingly neat in appearance, possessing some adjustments heretofore found only in the higher priced outfits.

The shutter is set by turning a small milled head on the front of camera. The speed is regulated by moving a small brass lever on the front. Time exposures are made by simply moving the time-lever downward. Press the button to open shutter, and an upward movement of time lever will close it.

The Handy has two view finders and two tripod plates, so that the camera can be used either horizontally or vertically on a tripod or in the hand.

A ground-glass screen, the full size of the plate, is also provided, permitting the operator to use the Handy as a regular view camera after dropping the hinged panel in the back.

The Lens is our well known R. O. Co.'s Single View, though the mounting is different. No other lens can be fitted to the Handy.

The Handy is neatly covered with black leather, and has a leather handle for carrying, presenting an exceedingly handsome appearance.

The price of this camera in no way conveys an idea of its real merit or value. It is, without question, the best Hand Camera that has ever been offered at so low a price.

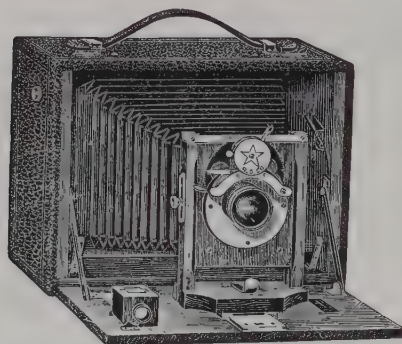
The size of Handy is $6\frac{3}{8} \times 7\frac{1}{4} \times 9\frac{7}{8}$ inches; it will hold three plate-holders. The same holder is used as with the Premier.

Made only in 4 x 5 size. One Perfection Holder is included in the price. A Roll Holder cannot be used.

4 x 5

Price, with one Holder,	-	-	-	-	-	-	-	-	\$8 00
Extra Plate-Holders, each,	-	-	-	-	-	-	-	-	1 00
Facile Film Holders (for cut films),	-	-	-	-	-	-	-	-	1 25

The Folding Premier.



The FOLDING PREMIER combines the numerous advantages possessed by the regular pattern, and in addition is much more compact.

To open for use, merely lower the front, thus forming a bed upon which the camera-front with lens moves forward on a brass guide.

The Folding Premier is fitted with rising and falling front and our new central swing back.

A reversible view finder is attached to the bed ; two tripod plates are provided for upright or horizontal views. A hinged panel at the back allows the image to be seen while focusing.

The lenses are the same as furnished with the regular Premier though the mounting is different, to admit of the Star Shutter. This shutter is the same as fitted to the Premo, and is described on page 27.

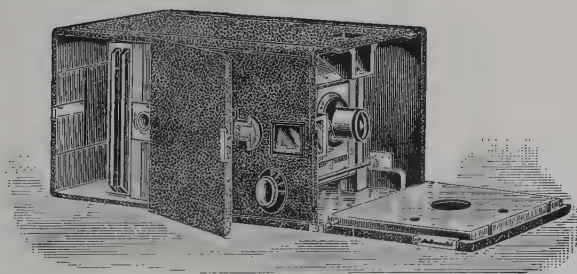
Glass plates, Cut and Roll films may all be used, as the different holders are interchangeable.

The appearance of the Folding Premier when open is extremely handsome, the entire bed and front being of polished mahogany and in perfect contrast with the black leather covering. When closed the 4 x 5 size measures only 6¾ x 7 x 7⅝ inches.

PRICE.

	4 x 5	5 x 7
Complete, with one Premier Plate-Holder,	\$18 00	\$24 00
With Rapid Rectilinear Lens,	23 00	32 00
Extra Premier Plate-Holders, each,	1 00	1 25
Facile Film-Holders (for cut films),	1 25	1 50
Roll Holder, empty,	8 00	10 00
Roll of Films, 24 exposures,	1 50	3 00
Roll of Films, 48 exposures,	3 00	6 00
Canvas Covered Case, with Shoulder Strap,	2 50	3 00
Leather Covered Case, with Shoulder Strap,	3 00	3 50

The Premaret.



The PREMARET Camera, is in reality, a miniature form of the Premier, but constructed throughout of selected mahogany and covered with fine grained leather, the inside being finished in shellac.

The Premaret has swing back, and rising and falling front, the working parts of which are *entirely inside* the camera. The axis of the swing is at the center, which is optically correct, and the focus as indicated by the dial is not disturbed.

The ground-glass screen is spring acting. It does not close after withdrawing the holder but remains open for its re-insertion. A touch on the brass button will close the screen for focusing.

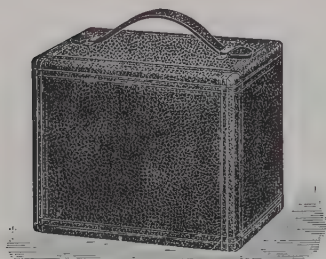
The lens and shutter are precisely the same as furnished with the Premier, (see description, page 20). Two finders are provided for upright and horizontal pictures, also two tripod plates for use on a tripod. There is a panel at the back for focusing.

Glass-plates, Cut and Roll films may all be used in the Premaret. The outside dimensions are $6\frac{3}{4} \times 10 \times 5\frac{1}{2}$ inches, including space for three Premo plate-holders, or Roll Holder.

PRICE.

	4 x 5
Premaret, with one Holder, - - - - -	\$20 00
With Rapid Rectilinear Lens, - - - - -	25 00
Extra Plate-Holders (Premo Holders), each, - - - - -	1 25
Facile Film-Holders (for cut films), - - - - -	1 35
Roll Holder, empty, - - - - -	10 00
Roll of Films, 48 exposures, - - - - -	3 00
Leather Covered Case for Premaret, with Shoulder Strap, -	3 00

The Premo.



The PREMIO is the most complete and practical hand camera ever placed on the market, possessing all latest improvements, and yet is the most compact camera ever made, the 4 x 5 measuring, when closed, but $5\frac{3}{4} \times 6\frac{7}{8} \times 5\frac{1}{4}$ inches, and weighs but a trifle over two pounds.

The Premo has Swing Back and Rising and Falling Front, the working parts of which are entirely within the camera. In fact, there are absolutely none of the working parts of the camera shown when the instrument is closed; merely a plain box covered with leather.

The Swing Back is adjusted by a simple mechanical method. A spring lever works in a series of notches in a brass plate. Pressure on the lever will allow the back to swing, locking it in the desired position when pressure is removed. The axis of the swing is at the center of the plate, which is optically correct.

The Premo is provided with two tripod plates, and has a panel at the back for focusing.

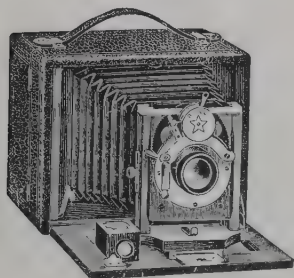
The view finder is attached to the bed and is reversible, for taking either horizontal or vertical views.

The ground-glass screen on the Premo is spring acting. The screen does not close after withdrawing the plate-holder, but remains open for its re-insertion. A touch on a spring-button closes the screen for focusing, or to exert a pressure on the holder when in place.

Glass Plates, Cut and Roll Films may all be used in the Premo as the Plate-Holders and Roll-Holder are interchangeable.

The insertion of the Roll-Holder in the Premo is very simple, indeed. Merely remove the ground-glass screen from its spring supports, attach Roll-Holder in the position formerly occupied by the screen, then place the screen back of Roll-Holder. The change from glass plates to films is but the work of a moment.

The Premo.



The Roll Holder is of the very latest design, fitted with an automatic indicator, which registers accurately the number of exposures made.

The Improved Star Shutter furnished with the Premo is one of the features of the outfit, being a strictly first class shutter in every detail. It works between the lenses, and is set by moving the upright lever to the left, the leaves remaining stationary. It has both finger and pneumatic release, with bulb and tube.

Time exposures are made by moving the time lever up as far as possible, and while in this position, one pressure on the release lever, or bulb, will open the shutter; a second pressure will close it. The speed is regulated by turning the metal disc to the right or left, the degrees of speed being indicated by numbers.

The lens is a fine Rapid Rectilinear, made especially for this camera and is adapted for general work. This lens may be removed from the shutter and our Wide Angle substituted when desired, as the cells of both lenses are interchangeable. It has removable lens board.

The Premo is made in the best possible manner, of the best materials; the box is made of mahogany, polished inside, and covered with handsome leather outside.

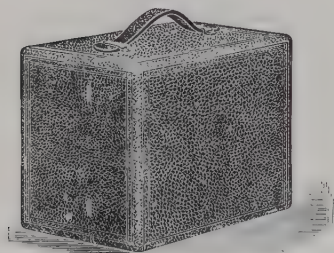
As will be seen by the experienced amateur, the above improvements make the Premo a perfect tripod camera as well as a hand camera, possessing all the features of a first-class view camera.

The holder is the Premo double holder, with rubber slides, conceded to be the simplest and best in the market. The camera will carry three holders.

PRICE.

	$3\frac{1}{4} \times 4\frac{1}{4}$	4×5	5×7	$6\frac{1}{2} \times 8\frac{1}{2}$
Premo, with one holder,	\$25 00	\$25 00	\$33 00	\$45 00
Extra for Wide Angle Lens,		10 00	12 00	15 00
Extra Plate-Holders,	1 25	1 25	1 50	1 75
Cut Film-Holder,	1 35	1 35	1 60	1 85
Roll Holder, empty,	10 00	10 00	12 50	16 00
Roll of Films, 60 Exposures	2 50	48 Exp. 3 00	32 Exp. 4 00	24 Exp. 4 00
			54 Exp. 6 00	48 Exp. 8 00
Leather Covered Case,	2 50	2 50	3 00	3 50

The Premo Sr.



The PREMIO SR. represents the very highest type of the Hand Camera, and will, without question, find favor among those of our friends desiring a strictly high grade camera, possessing the latest adjustments and adapted for use by either the advanced worker or the novice in the art.

The Premo Camera has grown step by step ever since its introduction, and its great popularity among all classes of both amateur and professional photographers, testifies in the most conclusive manner to its superiority.

The Premo Sr. is made from selected mahogany, covered with fine black leather. The appearance of the camera when open is extremely handsome, the finely polished mahogany bed, and lacquered metal work being in perfect contrast with the black leather covering.

The Premo Sr. combines all the essential features necessary for either hand or tripod work, in the most compact form, and at the same time is simply manipulated.

It is fitted with Double Swing Back, Double Sliding Front and Rack and Pinion for focusing, the working parts of which are entirely within the case. The camera is self contained, and when closed is merely a neat leather covered box.

Both the horizontal and vertical swings are at the center of the plate, and may be quickly adjusted by means of a spring lever, working in a series of notches in a brass plate at the side. A pressure on the lever will allow the back to swing, locking it in the desired position when pressure is removed.

The Double Sliding Front is an important feature and will be found convenient for work in confined situations.

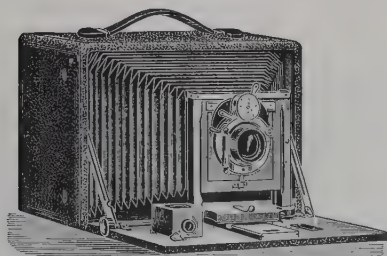
It matters not whether the plate is exposed in a horizontal or vertical position, all the adjustments may be used if necessary.

The Premo Sr. is fitted with two tripod plates and has a panel at the back for focusing.

A reversible View Finder is attached to the bed for upright or horizontal pictures.

We will hinge the bed where desired for use with extremely Wide Angle lenses; ordinary Wide Angle lenses do not need it.

The Premo Sr.



The Lens is a Rapid Rectilinear, adapted for all classes of work, being made especially for use with the Premo.

This Lens may be removed from the shutter and our Wide Angle substituted when desired, as the cells of both lenses are interchangeable.

The Shutter is the Improved Star, fitted with pneumatic and finger release, and is a feature of the outfit. It works between the lenses without noise or jar. It is set by moving the upright lever to the left, the leaves remaining stationary. Time exposures are made by moving the time lever up as far as possible, and while in this position, a pressure on the release lever or bulb will open the shutter,—a second pressure will close it.

The speed is regulated by turning the metal disc to the right or left, the degrees of speed being indicated by numbers.

The Premo Sr. has a removable lens board, so that other lenses and shutters may be adapted if desired.

The ground glass screen is spring acting, and is the same as attached to the regular Premo. Glass Plates, Cut and Roll Films may all be used as the holders are interchangeable.

The plate holder is the regular Premo holder with rubber slides.

The Roll Holder is the latest pattern, fitted with automatic indicator, for registering the number of exposures made. The change from glass plates to films is but the work of a moment, and as the Roll Holder is provided with a shield, it is not necessary to resort to a dark room.

The size of the 4×5 Premo Sr. when closed is only $7\frac{1}{4} \times 5\frac{1}{2} \times 5\frac{7}{8}$ inches, including space for three double holders, and it weighs but $2\frac{3}{4}$ pounds.

PRICE.

	$3\frac{1}{4} \times 4\frac{1}{4}$	4×5	5×7	$6\frac{1}{2} \times 8\frac{1}{2}$
Premo Sr. one Holder,	\$30 00	\$30 00	\$40 00	\$50 00
Extra for Wide Angle Lens,		10 00	12 00	15 00
Extra Plate Holders, -	1 25	1 25	1 50	1 75
Cut Film Holders, - -	1 35	1 35	1 60	1 85
Roll-Holder, empty, -	10 00	10 00	12 50	16 00
Roll of Films,				
60 Exposures, 2	50 45	Exp. 3 00	32 Exp. 4 00	24 Exp. 4 00
			54 Exp. 6 00	48 Exp. 8 00
Leather Covered Case, -	2 50	2 50	3 00	3 50
Extra for Hinged Bed		3 00	3 00	3 50

The Long Focus Premo.

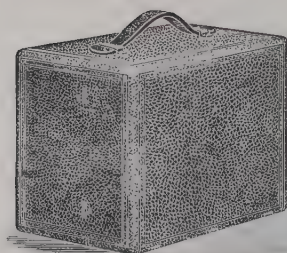


FIG. 1.

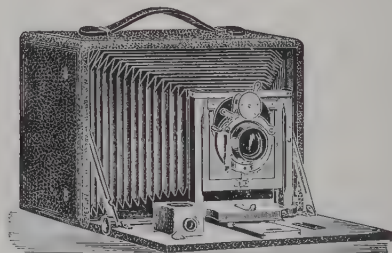


FIG. 2.

The LONG FOCUS PREMO is an entirely new form of Hand Camera, introduced for the first time this season, and we feel confident it will find favor among a very large class of workers, both amateur and professional.

As its name indicates, this style Premo possesses an extra long bellows, adapting it for the use of long focus lenses, as well as the style usually furnished.

The Long Focus Premo is similar in appearance to the Premo Sr. as a glance at the illustration will show, and it may be used in the same manner, either for hand or tripod work. While it is no less compact, it has nearly double the focal capacity of the Premo Sr.

The extra length of draw is obtained by the addition of a folding back. By simply touching a spring at the top, the back of the camera will drop, forming a bed, upon which the rear portion of the camera carrying the ground-glass screen will slide. A glance at Fig. 3 will convey the idea.

The Long Focus Premo may be used for copying, and all other purposes, requiring an extended length of bellows.

The Rapid Rectilinear Lens is symmetrical. The front combination may therefore be removed, and the rear lens used alone when desired, which approximately doubles the length of focus. For distant views this is desirable as the objects in the view are larger in the picture.

This camera is made throughout of mahogany, handsomely polished, the outside being covered with fine black leather.

The metal work is of polished and lacquered brass, and we have spared neither pains nor expense to make the Long Focus Premo a perfect camera in detail as well as entirety.

The Long Focus Premo has Double Swing Back, Double Sliding Front, and a fine Rack and Pinion movement for focusing. Both the horizontal and vertical swings are from the center of the plate, and may be quickly adjusted by a slight pressure on a brass lever, seen upon opening the door at the side.

The Long Focus Premo.

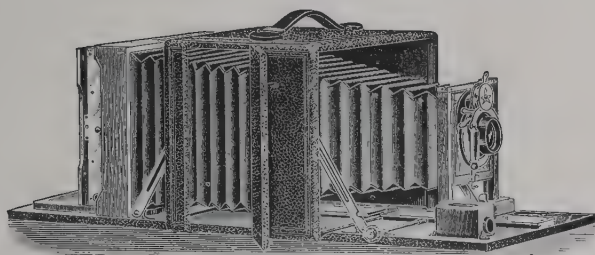


FIG. 3.

A brilliant reversible View Finder is conveniently placed on the bed of the camera ; two tripod plates are also fitted for both upright and horizontal pictures.

The Lens is the same as furnished with the Premo Sr. As the lens board is removable, any other lens may be readily attached, if desired.

The Improved Star Shutter is fitted to this camera, having both finger and pneumatic release. It is the same in every respect as furnished with the Premo Sr. and is described on page 29.

The ground-glass screen is spring acting, and does not close after withdrawing the plate-holder but remains open for its re-insertion. A touch on a spring button closes the screen for focusing, or to exert a pressure on the holder when in place.

The regular Premo holder is furnished with this camera. It is without question the most complete, practical and easiest to manipulate of any now in the market. All Premo Holders have rubber slides.

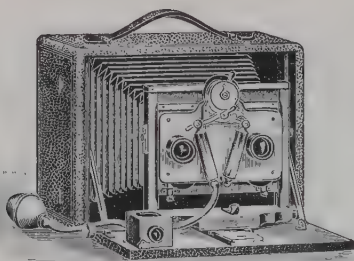
Glass Plates, Cut and Roll Films may all be used as the holders are interchangeable.

As will be seen from the above description the Long Focus Premo covers a field never before reached by the Hand Camera, and we believe its advantageous features will be quickly recognized and fully appreciated by both our amateur and professional friends.

PRICE.

	4 x 5	5 x 7	6½ x 8½	8 x 10
Long Focus Premo, one Holder.	\$35 00	\$45 00	\$55 00	\$70 00
Extra for Wide Angle Lens,	10 00	12 00	15 00	18 00
Extra Plate-Holders, ✓ -	1 25	1 50	1 75	2 25
Cut Film Holder, - -	1 35	1 60	1 85	2 30
Roll Holder, empty, - -	10 00	12 50	16 00	
Roll of Films, - 48 Exposures	3 00	32 Exp 4 00 54 Exp. 6 00	24 Exp 4 00 48 Exp 8 00	
Leather Covered Case, -	2 50	3 00	3 50	4 00
Extra for hinged bed, - -	3 00	3 00	3 50	4 00

The Stereoscopic Premo.



STEREOSCOPIC PHOTOGRAPHY is one of the most interesting and fascinating branches of the Art, and as the Hand Camera is now designed especially for this class of work, it will undoubtedly gain favor among a large number of amateurs, who have heretofore never attempted the production of Stereoscopic pictures.

We can furnish both the Premo and Premo Sr. in 5×7 and $6\frac{1}{2} \times 8\frac{1}{2}$ sizes, arranged for Stereo work, for which the front must be wider than regular.

The Stereo lenses are a matched pair of 4×5 Rapid Rectilinear lenses same as are used in 4×5 Premo, and fitted with Bausch & Lomb Stereo Shutter which works on same principle as their Diaphragm Shutter.

The shutter is designed especially for use with Stereoscopic Lenses. The action is so perfect that absolutely the same amount of light is admitted through both lenses. Revolving Diaphragms are provided for stops. The speed may be regulated at will, the shutter working automatically from 3 seconds to the 1-100 part of a second.

Time exposures of any desired length may be made by adjusting the time lever. Both finger and pneumatic release are attached.

The regular lens and shutter and the stereo lenses are on different lens boards, so that the change from regular full sized views to stereo work is but the work of a few seconds.

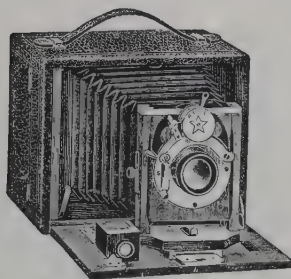
The Price includes the Rapid Rectilinear Lens and Star Shutter for full sized views, and the stereo lenses and shutter, together with a division in the camera.

Wide Angle Lenses may be used for full size view, same as with the regular Premo.

PRICE.

	5×7	$6\frac{1}{2} \times 8\frac{1}{2}$
Stereo Premo, with one Premo Holder, -	\$70 00	\$80 00
Stereo Premo Sr., with one Premo Holder, -	75 00	85 00
Extra for Wide Angle Lens, - - -	12 00	15 00
Extra Premo Holders, - - - -	1 50	1 75
Cut Film-Holder, - - - - -	1 60	1 85
Roll Holder, empty, - - - - -	12 50	16 00
Roll of Films. - - - - -		
32 Exposures	4 00	24 Exp. 4 00
54 Exposures	6 00	48 Exp. 8 00
Leather Covered Cases, - - - -	3 00	3 50

The Premo B.



The PREMIO B is patterned closely after the regular Premo, described on page 26. While not so highly finished as the more expensive outfits, yet the same care is exercised in its construction throughout.

It is provided with our new central Swing Back and Rising and Falling Front, thus adapting it for both hand and tripod work. It is also fitted with the Star Shutter, for description of which see page 27.

Premo B is fitted with the R. O. Co.'s Single View or Rapid Rectilinear Lens as may be preferred. The Rapid Rectilinear Lens is precisely the same as fitted to the regular Premo.

A reversible view finder is fitted to the bed for both vertical and horizontal pictures; also two tripod plates for attaching the camera to a tripod. The ground-glass screen is spring actuated, and recedes to allow the insertion of the plate-holder.

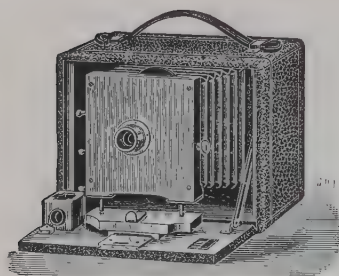
Glass Plates, Cut and Roll Films may all be used, as the holders are interchangeable.

Premo B will carry three double plate-holders. The outside dimensions of 4×5 are only $5\frac{1}{2} \times 5\frac{3}{8} \times 7$ inches, and the weight two pounds. It is handsomely covered with fine black leather and has a leather handle for carrying.

PRICE.

		4 x 5	5 x 7
Premo B, with one Plate-Holder,	- - -	\$16 00	\$23 00
With Rapid Rectilinear Lens,	- - -	21 00	30 00
Extra Premo Plate-Holders,	- - - -	1 25	1 50
Cut Film Holders,	- - - -	1 35	1 60
Roll Holder, empty,	- - - -	10 00	12 50
Roll of Films,	- - - - 48 Exposures	3 00	32 Exp 4 00 54 Exp. 6 00
Leather Covered Case,	- - - -	2 50	3 00

The Premo C.



This camera is carefully made, the workmanship being of the best. It is exceedingly neat in appearance, being shellacked inside and covered with fine black leather outside. It is provided with Swing Back and Sliding Front. The back swings from the *center*.

Premo C is fitted with our well known Single View or Rapid Rectilinear Lens, as may be preferred. It has our New Safety Shutter, a neat and effective device for all classes of work. The shutter is quickly set by a lever at the side, the leaves remaining stationary.

The ground-glass screen on Premo C is spring acting, and recedes to allow the insertion of the plate-holder. A hinged panel at the back permits the full sized image to be seen while focusing. Two tripod plates are fitted for using the Premo C as a regular view camera.

The View Finder is attached in a convenient position on the bed, and is reversible for both upright and horizontal pictures.

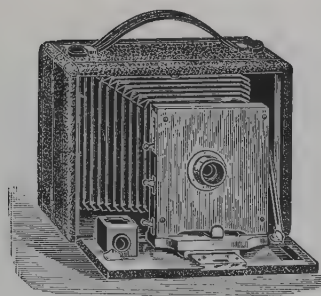
Glass Plates, Cut and Roll Films may all be used.

From the above description it will be seen that Premo C is fitted with the necessary adjustments for the large and varied character of work usually attempted by the ambitious amateur. We can heartily recommend it to all desiring a thoroughly practical camera, yet at a moderate price. Dimensions are the same as style B.

PRICE.

		4 × 5	5 × 7
Premo C, with one Plate-Holder,	- - -	\$12 00	\$20 00
With Rapid Rectilinear Lens,	- - -	17 00	28 00
Extra Premo Plate-Holders,	- - -	1 25	1 50
Cut Film-Holders, - - -	- - -	1 35	1 60
Roll Holder, empty, - - -	- - -	10 00	12 50
Roll of Films, - - -	48 Exposures 3 00	32 Exp. 4 00	54 Exp. 6 00
Leather Covered Case, - - -	- - -	2 50	3 00

The Premo D.



This style of Premo is like Style C, except it is without the swing back and spring actuated ground-glass screen.

The same care is exercised in its construction as in the others of the series, and this Camera will prove very popular among those who do not care for the adjustments named. The same Shutter and Lenses are used as on style C.

The ground-glass screen is removable: to focus on the ground-glass, slide the screen in the forward groove; when placed in the rear groove it acts as a support for the plate-holder; when using Roll Holder, the screen is placed at the back of Camera, the springs serving to exert a pressure on holder to keep it in place.

Premo D 4 x 5 when closed measures only $5\frac{1}{2} \times 5\frac{1}{2} \times 6\frac{3}{8}$ inches, weighs only two pounds, and will hold three plate-holders, or Roll-Holder.

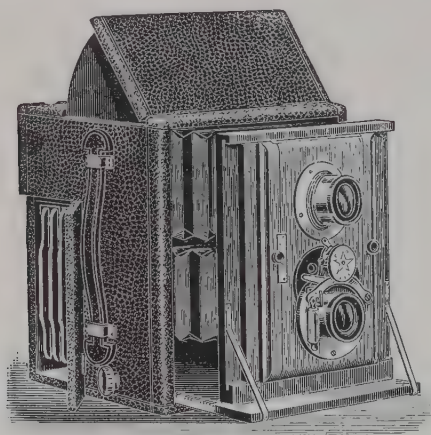
As will be seen from the above description Premo D is a thoroughly practical camera, and will fully meet the demands of a large class of amateurs. It is without question the best Folding Camera ever offered at so low a price.

Glass Plates, Cut and Roll Films, may all be used.

PRICE.

	4 x 5	5 x 7
Premo D, with one Plate-Holder, - - - - -	\$10 00	\$18 00
With Rapid Rectilinear Lens, - - - - -	15 00	26 00
Extra Premo Plate-Holders, - - - - -	1 25	1 50
Cut Film Holders, - - - - -	1 35	1 60
Roll-Holder, empty, - - - - -	10 00	12 50
Roll of Films, - - - - -	48 Exposures 3 00	32 Exp. 4 00
		54 Exp. 6 00
Leather Covered Case, - - - - -	2 50	3 00

The Carlton Twin Lens Camera.



THE CARLTON TWIN LENS CAMERA, as will be seen by the illustrations, is a divided camera, having two lenses of precisely the same focus, one placed above the other; the lower one forms the picture on the plate, while the upper one reflects the image on a ground-glass at the top of the camera.

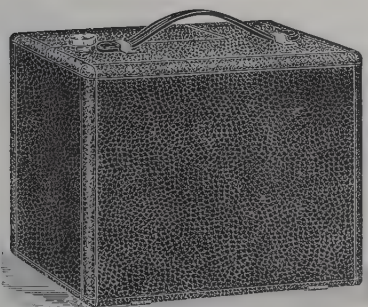
The ground-glass is the full size of the plate, and as the two lenses are identical in focus, the advantage of this arrangement is apparent and will be appreciated.

The ground-glass is covered by a lid which is raised, and this lid has a shield at each side to further screen the light from the ground-glass so that the image may be the more plainly seen. This lid has a mirror on the under side so that when the camera is reversed for vertical views the image on the ground-glass can be seen in the mirror.

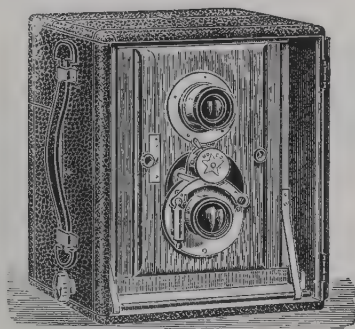
The camera is provided with tripod plates, for use on a tripod if desired, and it has a panel for observing the ground-glass of camera, if preferred to the full sized view finder.

This view finder slides backward when the camera is closed, as the position occupied by this when in use is required for the front with lenses when the camera is closed. In opening the camera, the view finder will slide forward and lock automatically after you have racked the front of camera forward. When you close the lid it will unlock the finder, when it will slide backward by racking the front back.

The Carlton Twin Lens Camera.



CLOSED.



PARTIALLY OPEN.

THE CARLTON TWIN LENS CAMERA is provided with Double Shifting Front, for adjusting sky and foreground both in vertical and horizontal pictures. Our new central Swing Back is also fitted similar to the Premo, and is operated by a small brass lever seen on opening the door at the side.

The body of the camera is telescopic, the adjustment being made with a fine rack and pinion. This construction renders the instrument very compact and portable. When closed it measures only $6\frac{3}{4} \times 6\frac{3}{4} \times 8\frac{1}{4}$ inches and holds three holders or Roll Holder. The Premo holder with rubber slides is used.

The Star Shutter is fitted to the Twin Lens Camera, and is a feature of the outfit. This shutter is the same as used on Premo and described on page 27.

This camera is made in the best possible manner, of mahogany, polished inside and covered with morocco leather outside.

Glass Plates, Cut and Roll Films may all be used.

While we list it with Darlot Lens only, yet we can fit almost any lens of not over $6\frac{1}{2}$ -inch equivalent focus.

PRICE.

	4 x 5
Carlton Twin Lens Camera, with Darlot Lens, and one Holder,	\$75 00
Extra Premo Plate-Holders, - - - - -	1 25
Cut Film Holders, - - - - -	1 35
Roll Holder, empty, - - - - -	10 00
Roll of Films, 48 exposures, - - - - -	3 00
Leather Covered Case, with strap, - - - - -	3 00

The Perfection Holder.

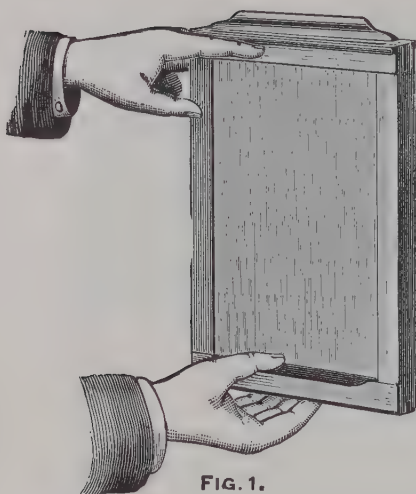


FIG. 1.

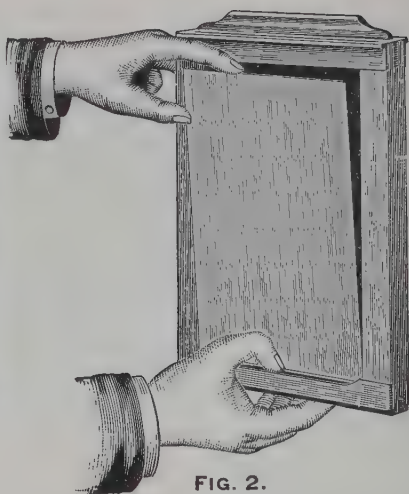


FIG. 2.

The **PERFECTION DOUBLE PLATE-HOLDER** is the simplest and best plate-holder ever placed on the market ; it is simply *perfection*.

To load the Perfection Holder, the end of the plate is rested against the spring-bar at the end of the holder, then by simply pressing the spring-bar with the thumb the plate falls into place.

To unload the Perfection Holder, hold it as illustrated in Figure 1, and by pressing on the spring-bar the plate will fall forward, the edge resting against the fingers, as illustrated in Figure 2.

On account of its simplicity the Perfection Holder can be loaded and unloaded with the greatest of ease, even in absolute darkness.

As the plate is held in place by the ends only, the *full width* of the plate is exposed and but 1-16 inch is cut off from each end.

In ordering Holders, always give name of camera they are to fit.

$3\frac{1}{4} \times 4\frac{1}{4}$	-	\$1 00	5 x 8	-	\$1 35	10 x 12	-	\$3 00
4 x 5	-	1 00	$6\frac{1}{2} \times 8\frac{1}{2}$	-	1 60	11 x 14	-	4 00
$4\frac{1}{4} \times 6\frac{1}{2}$	-	1 25	8 x 10	-	1 85	14 x 17	-	5 00
5 x 7	-	1 25						

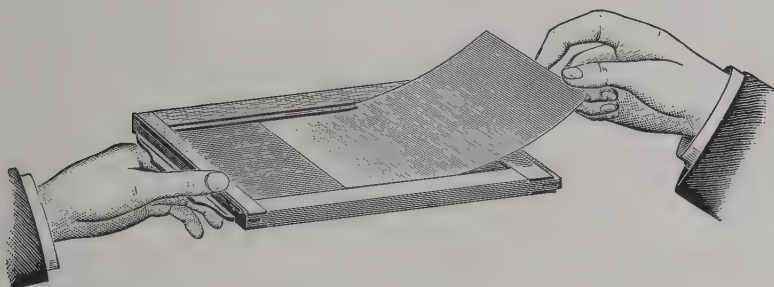
The Perfection Jr. Holder.

This Holder is made on the same principle as the Perfection, but is more compact and has rubber slides.

$3\frac{1}{4} \times 4\frac{1}{4}$	-	\$1 25	5 x 8	-	\$1 60	10 x 12	-	\$4 00
4 x 5	-	1 25	$6\frac{1}{2} \times 8\frac{1}{2}$	-	1 75	11 x 14	-	5 00
5 x 7	-	1 50	8 x 10	-	2 25			

The Facile Film Holder.

FOR CUT FILMS.



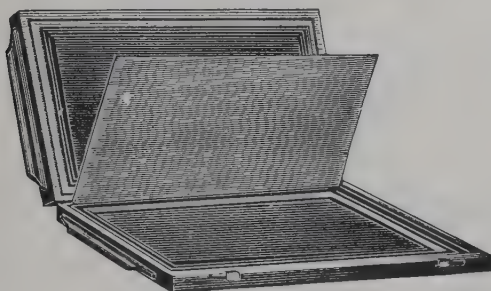
The Facile Film-Holder is made interchangeable with the Perfection Plate-Holder, so either may be used on the same camera.

The Facile Film-Holder is very simple to load and unload, and we believe it to be the best film-holder in the market.

$3\frac{1}{4}$	x	$4\frac{1}{4}$	-	-	\$1 25
4	x	5	-	-	1 25
$4\frac{1}{4}$	x	$6\frac{1}{2}$	-	-	1 40
5	x	7	-	-	1 50

5	x	8	-	-	\$1 60
$6\frac{1}{2}$	x	$8\frac{1}{2}$	-	-	1 85
8	x	10	-	-	2 20

English Book Holder.



EXTRA THIN.

This is the regular English form of holder, and it has many advantages; the two sides are hinged, and open like a book when placing or displacing the plates; the septum, for division between the two sides of holder, is also hinged, and no trouble to put in place in the dark-room.

$3\frac{1}{4}$	x	$4\frac{1}{4}$	\$1 60	$6\frac{1}{2}$	x	$8\frac{1}{2}$	\$2 25	14	x	17	\$6 00
4	x	5	1 60	8	x	10	3 00	17	x	20	7 50
$4\frac{1}{4}$	x	$6\frac{1}{2}$	1 75	10	x	12	4 00	18	x	22	10 00
5	x	7	1 85	11	x	14	5 00	20	x	24	13 50
5	x	8	2 00								

Mahogany Holders.

We make both Perfection Plate-Holders and Film Holders of Mahogany, polished, and with rubber slides, as a few of our customers who buy the Universal and Carlton Cameras desire the plate-holders to correspond in appearance to the camera.

As it is purely a matter of satisfaction, we cannot consistently ask our customers to buy these instead of the regular kind, for while they are very handsome they are not in quality any better, in fact we were urged to make them in this manner by some of our customers.

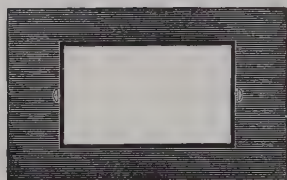
PERFECTION HOLDERS.

3¼ x 4¼	-	-	\$1 50
4 x 5	-	-	1 50
4¼ x 6½	-	-	1 90
5 x 7	-	-	2 00
5 x 8	-	-	2 00
6½ x 8½	-	-	2 40
8 x 10	-	-	2 85
10 x 12	-	-	4 50

FILM-HOLDERS.

3¼ x 4¼	-	-	\$1 75
4 x 5	-	-	1 75
4¼ x 6½	-	-	2 00
5 x 7	-	-	2 15
5 x 8	-	-	2 25
6½ x 8½	-	-	2 75
8 x 10	-	-	3 25

Inside Kits.



Consist of thin wooden frames, made to fit in the Dry Plate-Holder, and with rabbets for holding smaller plates.

Our Kits have buttons at each end of aperture for holding plate in place.

4 x 5	to hold	3¼ x 4¼ plates, each,	-	-	-	\$0 25
4¼ x 6½	"	3¼ x 4¼ plates, each,	-	-	-	25
5 x 7	"	3¼ x 4¼ or 4 x 5 plates, each,	-	-	-	30
5 x 8	"	3¼ x 4¼, 4 x 5 or 4¼ x 6½ plates, each,	-	-	-	30
6½ x 8½	"	4 x 5, 4¼ x 6½, 5 x 7, or 5 x 8 plates, each,	-	-	-	35
8 x 10	"	4¼ x 6½, 5 x 7, 5 x 8, or 6½ x 8½ plates, each,	-	-	-	40
10 x 12	"	5 x 7, 5 x 8, 6½ x 8½ or 8 x 10 plates, each,	-	-	-	50
11 x 14	"	8 x 10 or 10 x 12 plates, each,	-	-	-	60
14 x 17	"	8 x 10, 10 x 12 or 11 x 14 plates, each,	-	-	-	75
17 x 20	"	11 x 14 or 14 x 17 plates, each,	-	-	-	1 00
18 x 22	"	14 x 17 or 17 x 20 plates, each,	-	-	-	1 50

Tripods.



Standard Folding Tripod.

This is our original style of tripod, an extended description of which is hardly necessary.

When the tripod head is removed, the legs will fold to half length.

The tripod screw remains always in the iron top ready for use and not liable to loss.

It is light, strong and rigid.

Price, for cameras from 4 x 5
to 6½ x 8½ - - - \$2 00

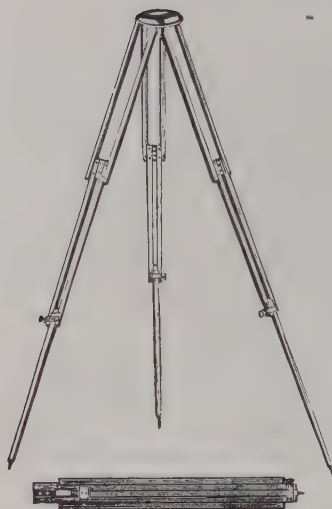
Carlton's Sliding Tripod.

This is the simplest and best form of Sliding Tripod. The legs are made in three pieces, same as the folding, which renders the tripod firmer when set up than where made of two pieces, which is the ordinary form. The tripod top is of wood, with cloth cover. The brass clamps each side of the leg have the ends turned toward each other, and when clamped the pressure is exerted from all sides, rendering it the most rigid tripod in market. The special advantages of a sliding tripod over a folding one are ease of leveling the camera in rough places by adjusting the length of tripod legs, and the quickness with which it is set up or taken down.



No. 1—For 3¼ x 4¼ to 4½ x 6½ cameras,	-	\$2 50
No. 2—For 5 x 8 and 6½ x 8½ cameras,	-	3 00
No. 3—For 8 x 10 and 10 x 12 cameras,	-	3 50
No. 4—For 11 x 14 and 14 x 17 cameras,	-	4 50
No. 5—For 17 x 20 and 20 x 24 cameras,	-	5 50

Combination Tripod.



COMBINED SLIDING AND FOLDING.

This Tripod is one of the most convenient forms of tripod ever introduced. It is jointed in three lengths, and when closed is but 22 inches long. The tripod top is of wood, covered with cloth.

As the lower section slides, the tripod has all the advantages of adjustment of the sliding tripod.

- No. 1—For $3\frac{1}{4} \times 4\frac{1}{4}$ to $4\frac{1}{4} \times 6\frac{1}{2}$, \$3 00
- No. 2—For 5×8 and $6\frac{1}{2} \times 8\frac{1}{2}$, 3 50
- No. 3—For 8×10 and 10×12 , 4 00
- No. 4—For 11×14 and 14×17 , 5 00
- No. 5—For 17×20 to 20×24 , 6 00

Cane Tripod.

This Tripod is an ingenious invention, having the appearance of a cane when closed. Each leg is one-third of a circle outside; when folded the tripod measures only $1\frac{1}{2}$ inches diameter and weighs but 32 ounces. For use with light 4×5 cameras only. Price, \$4 50.

Perfection Tripod.

DOUBLE SLIDING.

In design and finish this Tripod leaves nothing to be desired. It is thoroughly made, every point being as near *perfection* as possible.

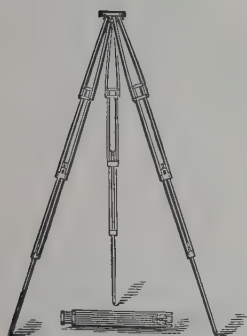
The lower section slides within the second, which in turn is contained within the third, thus rendering the tripod quite compact when closed.

- No. 1—For cameras $3\frac{1}{4} \times 4\frac{1}{4}$
to $4\frac{1}{4} \times 6\frac{1}{2}$ - \$5 50
- No. 2—For cameras 5×7 to
 8×10 - - 6 00



Carlton Compact Tripod.

FOR HAND CAMERAS.



The Carlton Compact Tripod is especially designed for use with hand cameras. It is a combined sliding and folding pattern, made exceedingly light and portable, yet of sufficient strength to preserve proper rigidity. It is easily and quickly set up for use, each section of the leg locking itself in place automatically, doing away with set screws. When folded the Carlton Compact Tripod measures only 15¾ inches in length, and weighs but a trifle over two pounds, including the circular top.

Price, - - - \$5 00

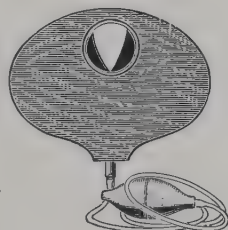
The Weller Wing Shutter.

FOR TIME AND INSTANTANEOUS WORK.

This is one of the best shutters in market for either the amateur or professional photographer.

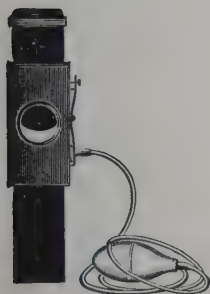
The Weller Shutter is very simple in its construction and cannot well get out of order, and works with a minimum jar and is nearly noiseless.

The Weller Shutter is made to fit on end of lens.



Price, - - - \$4 00

Universal Drop Shutter.



This is a very simple, yet effective form of shutter. The slide falls of its own weight when released, and by the use of a rubber band, any degree of rapidity may be obtained.

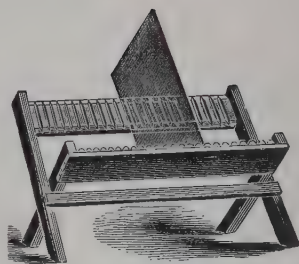
The body of the shutter being of mahogany it has a very handsome appearance. A thin strip of rubber is placed in the top of the shutter to lessen the concussion caused by the falling slide.

Price, with spring release, - - - \$1 00
With Britton's pneumatic release, bulb and tube, 1 50

Folding Negative Rack.

An inexpensive and very convenient accessory for the dark room, preventing the negatives from becoming scratched while drying. Holds 24 negatives.

- No. 1—For plates up to $6\frac{1}{2} \times 8\frac{1}{2}$, \$0 40
 No. 2—For plates 8×10 to 14×17 , 70



Universal Shutter, for Stereoscopic Lenses.



This is similar to the Universal Drop Shutter, except for two lenses, and as the slide moves horizontally, it is moved by a rubber band.

Price, - - - - - \$1 50

Carlton's Stereoscopic Exposer.



The CARLTON STEREOGRAPHIC EXPOSER is not designed for instantaneous work, but rather is a device for exposing the two lenses simultaneously, though it can be done very rapidly indeed.

Price, - - - - - \$2 00

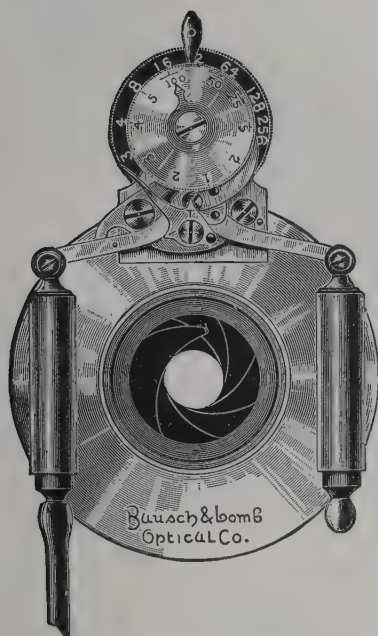
View Finder.

The View Finder is in reality a miniature camera, and is attached to the top of a view camera in taking instantaneous pictures.

The same view is seen on the screen of the finder as is reflected in the camera, and by observing the screen of the finder, the exact moment for exposure can be told.

Price, - - - - - \$1 25

Diaphragm Shutter.



The DIAPHRAGM SHUTTER will be found to meet every requirement of the amateur or professional photographer desiring a strictly first-class shutter for in-door or out-door work.

It is constructed in the best possible manner, operates without concussion, even when set at the highest speed, and is almost noiseless in action.

No loose diaphragms for the lens are necessary with this shutter, as the leaves serve the purpose of stops. The variation in size of the opening is made by turning the black disc with index, shown in the illustration.

The pointer on the small index indicates the speed. The shutter will work automatically from three seconds to the one-hundredth part of a second, and by simply moving

a small lever, it may be set for time exposure of any desired duration. In the latter case a pressure on the bulb closes the shutter.

It is provided with safety device so that in setting shutter the blades are not opened and can therefore make no exposure.

The movement during exposure is almost absolutely free from concussion.

All parts which must be manipulated are placed at the front, easy of access.

PRICE.

Fitted to Universal, Clark or Ex-celsior Lenses, no extra barrel.

3¼ x 4¼	-	-	\$12 50
4 x 5	-	-	12 50
5 x 8	-	-	13 50
6½ x 8½	-	-	14 50
8 x 10	-	-	16 00

Fitted to other Lenses leaving the Original Barrel intact.

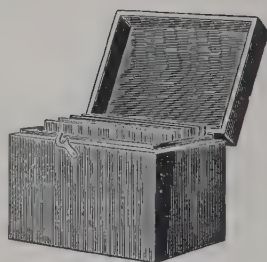
3¼ x 4¼	-	-	\$14 50
4 x 5	-	-	14 50
5 x 8	-	-	15 50
6½ x 8½	-	-	16 50
8 x 10	-	-	18 00

Negative Boxes.

Made from selected whitewood, with hinged cover. Are exceedingly convenient for storing negatives.

Each holds 24 plates.

$3\frac{1}{4} \times 4\frac{1}{4}$	\$0 60	5 x 8	\$0 70
4 x 5	60	$6\frac{1}{2} \times 8\frac{1}{2}$	85
$4\frac{1}{4} \times 6\frac{1}{2}$	65	8 x 10	1 00
5 x 7	70	10 x 12	1 50



Dry Plate Safety Boxes.

These are made similar to the Negative Box, but with all joints thoroughly broken, and are lined with black velvet, which prevents reflection.

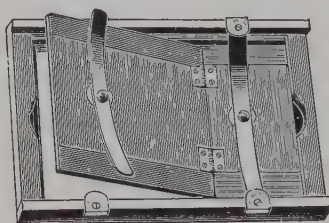
They are useful in the dark room, as the box of plates may be put in the safety box, saving wrapping and unwrapping them when filling the holders in a hurry.

A lock and key can be furnished with each at 60 cents extra.

$3\frac{1}{4} \times 4\frac{1}{4}$	- - -	\$0 75	5 x 8	- - -	\$1 00
4 x 5	- - -	75	$6\frac{1}{2} \times 8\frac{1}{2}$	- - -	1 20
$4\frac{1}{4} \times 6\frac{1}{2}$	- - -	90	8 x 10	- - -	1 40
5 x 7	- - -	1 00	10 x 12	- - -	2 00

Favorite Printing Frames.

$3\frac{1}{4} \times 4\frac{1}{4}$	\$0 40
4 x 5	40
$4\frac{1}{4} \times 6\frac{1}{2}$	45
5 x 7	50



5 x 8	\$0 55
$6\frac{1}{2} \times 8\frac{1}{2}$	60
8 x 10	75

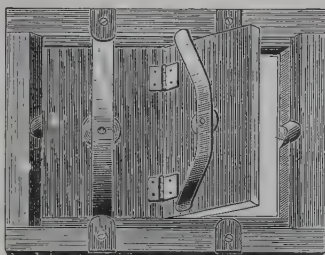
Having been requested to make a lighter Printing Frame than our regular flat frame, we comply, and place the favorite on the market with the full confidence that it will prove all that the name implies.

While the Favorite is much lighter than the ordinary flat printing frame, it is equal in strength and durability, making it especially desirable for amateurs.

These frames have the same style of catch, spring, etc., as the R. O. Co.'s Flat Printing Frame; the backs also being cut in the same manner.

R. O. Co.'s Flat Printing Frames.

3¼ x 4¼	\$0 40
4 x 5	40
4¼ x 6½	45
5 x 7	50
5 x 8	55
6½ x 8½	60



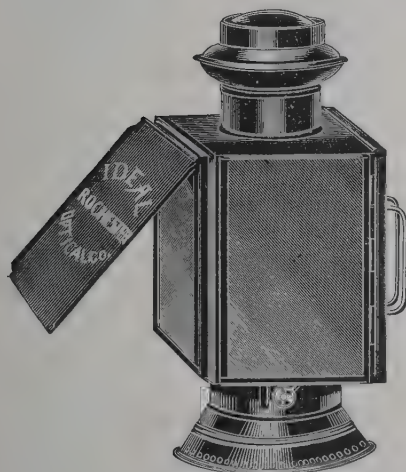
8 x 10	\$0 75
10 x 12	1 00
11 x 14	1 75
14 x 17	2 25
16 x 20	2 75
17 x 20	3 00

Our Printing Frames are constructed on an improved plan. The springs are fastened by rivets instead of screws, and have a washer placed under them to prevent wear on the wood-work.

The catch-buttons are set into the wood flush with the frame, so that they pile up readily.

The back is made to open at the center, or two-thirds, whichever style be wanted, though we find best sale for the latter, as it allows more of the print to be seen during printing.

Ideal Lantern.



We claim this is the best lantern for the dark-room yet placed on the market. Improved method of ventilation. A superior burner. Perfect combustion, whether wick is turned high or low. No smoke; no smell; steady light; safe light.

There are three sides for light, each of which has a double glass, one sheet each Orange and Ruby, which combination makes a perfectly safe light.

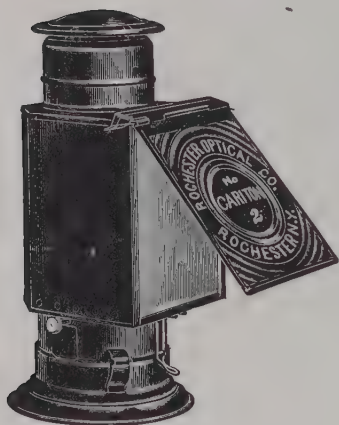
The front side is provided with a shield to protect the eyes, and also to reflect the light down toward the developing tray. It also

has a silvered reflector, thus increasing the volume of light.

If desired, one side may be used for making transparencies, or for printing with bromide paper, by using a sheet of ground glass in place of the Orange, and a tin slide or shield in place of the Ruby.

Price, - - - - - \$3 00

The Carlton Lantern.

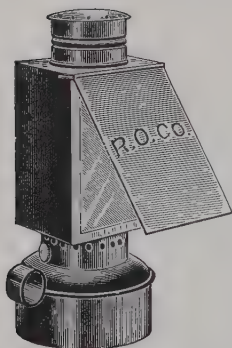


The CARLTON LANTERN is made upon an improved plan, giving an abundant draft, and complete ventilation, hence no smoke, no fume, but a steady, safe light, *and plenty of it.*

The front is fitted with both Orange and Ruby glass. The body is hinged at the back, giving easy access to the interior. The flame is regulated entirely from the outside. The back of the lamp serves as a reflector, and aids in producing a volume of light sufficient for work in any dark-room. Made in two sizes.

Price, No. 1, - \$1 50 | Price, No. 2, - \$2 00

The Universal Ruby Lantern.



For the amateur, who prefers a Lantern lower in price than either the Carlton or Ideal, the Universal will be found to meet every requirement. The ventilation is perfect and the volume of light ample for the purpose of the ordinary amateur. The Universal Lantern is made in two sizes, the No. 2 being larger, and has the body hinged at the back, similar to the Carlton; while in the No. 1 the glass is raised in the slide to light the wick. In either case the light is controlled from the outside.

The Universal is the most popular lantern in the market.

Price, No. 1, \$0 80 | Price, No. 2, \$1 00

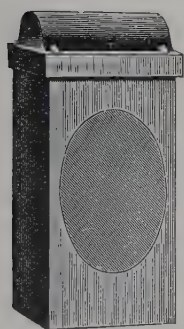
The Gem Ruby Lamp.



The GEM RUBY LAMP is one of the neatest lamps for dark-room purposes ever placed on the market. It gives an abundance of safe light for all the purposes of the ordinary amateur, and the ruby chimney being round, the light is emitted in all directions.

The Gem is the most compact lamp in market, and can be carried on a trip with no inconvenience.

To light the Gem Lamp the ruby chimney is removed, same as on an ordinary house lamp. Price, \$1 00.



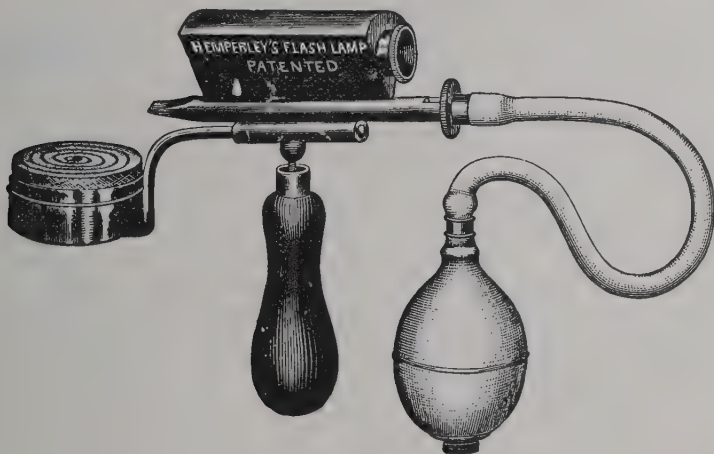
Folding Candle Lantern.

This is the best lantern ever made for traveling, folding into very small space. The top and bottom both are removed and the body of the lantern folds perfectly flat, and all packs into a box which is but one inch deep.

The lantern contains no glass, ruby fabric being used instead.

Price, - - - \$0 75

Hemperley Magazine Flash Lamp.

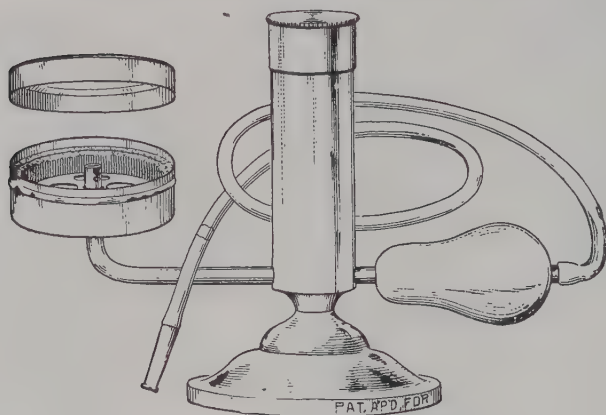


(PATENTED.)

This lamp is the invention of one of the most successful workers in Flash Light Photography, and is well and favorably known. Owing to its many good features it has had large sales among both professional and amateur photographers. As will be seen from the illustration, a magazine is provided for containing the supply of magnesium. By simply turning the milled head at the end of the barrel the lamp is instantly loaded, and ready for use. The magazine will hold an ounce of powder, sufficient for a number of exposures.

Price, - - - - - \$2 75
Pure Magnesium, fine ground, per ounce, 50

Perfection Magazine Flash Lamp.



The PERFECTION is considered the best magazine lamp yet produced for the use of pure magnesium.

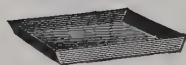
The magazine, when loaded to its full capacity, contains powder sufficient for twenty flashes. An instantaneous flash or a *continuous flame of light* may be produced, the length of exposure depending upon the will of the operator. The circular wick produces a large volume of flame, entirely consuming the full discharge of powder.

A mouth-piece and rubber tubing are supplied with each lamp ; a bulb may be attached if preferred.

The extreme simplicity of the Perfection Lamp, the ease of manipulation, and the excellent results produced, will recommend it to all desiring a safe and thoroughly practical instrument at a low price.

Price, complete, - - - - - \$2 00

Japaned Tin Developing Trays.



4 x 5	-	\$0 20	6½ x 8½	-	\$0 30
5 x 8	-	25	8 x 10	-	40

Vulcanized Rubber Trays.

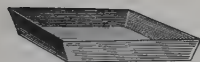


The neatest Developing Tray yet introduced is that made from vulcanized rubber. It has a polished surface, thus it is readily kept clean.

	SHALLOW.	DEEP.		SHALLOW.	DEEP.
4 x 5	\$0 30	\$0 50	6½ x 8½	\$0 75	\$0 85
5 x 8	60	70	8 x 10	1 10	1 15

Papier Mache Trays.

FOR DEVELOPING, FIXING OR TONING.



Papier Mache Trays are light in weight, yet tough and strong. As they are not affected by the action of chemicals, and are easily kept clean, we recommend them for all purposes. Our trays have ridges along the bottom, to facilitate handling the plate.

4	x	5	-	-	-	\$0	30	8	x	10	-	-	-	\$1	00
5	x	7	-	-	-	50		10	x	12	-	-	-	1	25
5	x	8	-	-	-	55		11	x	14	-	-	-	2	50
6½	x	8½	-	-	-	80		14	x	17	-	-	-	3	25
17	x	20	-	-	-									\$5	00

Agate-Ware Pans.

FOR TONING PRINTS.

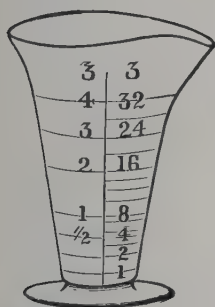


Stronger and lighter than porcelain and not liable to breakage.

7	x	9	-	-	-	\$1	00	10	x	12	-	-	-	\$1	50
8	x	10	-	-	-	1	25	12	x	14	-	-	-	1	80

Graduated Glasses.

FOR MEASURING LIQUIDS.



Minim,	-	-	-	-	-	\$0	25
1 ounce,	-	-	-	-	-	20	
2 "	-	-	-	-	-	25	
4 "	-	-	-	-	-	30	
8 "	-	-	-	-	-	40	
12 "	-	-	-	-	-	55	
16 "	-	-	-	-	-	70	

Glass Funnels.



½ Pint,	-	-	\$0	12	1 Quart,	-	-	\$0	20
1 "	-	-	15		2 "	-	-	25	

Fluted Glass Funnel and Filter.



THE FLUTED FUNNEL is the best glass funnel made, being very strong. It has glass ribs on the inside, forming passages through which the solution passes quickly while filtering.

½ Pint,	-	-	\$0	15	1 Quart,	-	-	\$0	30
1 "	-	-	20		2 "	-	-	45	

Glass Forms.

Stereoscopic, Arched Top, \$0 50	5 x 7, Square Corners, \$0 60
3¼ x 4¼, Square Corners, 40	5 x 8, " " 70
4 x 5, " " 45	6½ x 8½, " " 80
Cabinet, " " 50	8 x 10, " " 1 00
4¼ x 6½, " " 55	

Absorbent Cotton.

2 oz. Parcel, - - \$0 20	8 oz. Parcel, - - \$0 50
4 oz. " - - - 30	1 lb. " - - - 75

Developing Tong.

A very convenient article for development, avoiding the necessity of handling the plate with the fingers.



No. 1—For Plates 3¼ x 4¼ to 6½ x 8½, \$0 50

No. 2—For Plates 5 x 7 to 8 x 10, 60

Bristle Brushes.

For mounting photographs, also good for dusting out plate-holders.



1 inch wide, - \$0 15	2½ inches wide, - \$0 30
1½ " " - - 20	3 " " - - 40
2 " " - - 25	

Siberian Brushes.

For dusting plates or holders.



1 inch wide, - \$0 20	2½ inches wide, - \$0 50
1½ " " - - 30	3 " " - - 60
2 " " - - 40	

Camel's Hair Brushes.

Very soft, for dusting off plates.



1 inch wide, - \$0 25	2½ inches wide, - \$0 60
1½ " " - - 40	3 " " - - 80
2 " " - - 50	

Blotting Paper.

9 x 12 inches, per dozen sheets, - - - - \$0 25
12 x 19 " " " " - - - - 50
19 x 24 " " " " - - - - 1 00

Negative Preservers.

These are envelopes made of strong manilla paper, the proper size for the negative ; they are open at the end for inserting the negative, and have space cut for admitting the thumb and finger in removing it.

On the face are printed lines for name, number, description and remarks. They are invaluable for preserving the negative from dust, scratches, etc. Put up in packages of fifty each.

$3\frac{1}{4} \times 4\frac{1}{4}$, per package,	\$0 20	5 x 8, per package,	\$0 30
4 x 5, " "	20	$6\frac{1}{2} \times 8\frac{1}{2}$, " "	35
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	25	8 x 10, " "	45
5 x 7, " "	30	10 x 12, " "	75

Focusing Cloths.

Gossamer Rubber,	-	\$0 60	Velvet, extra large size,	\$2 50
Velvet, small,	-	1 00		

Pocket Scales.



For weighing small quantities this scale is especially designed and well adapted to the use of the ordinary amateur, and is excellent for traveling.

Weighs grains and drams.

5-inch beam, 2-inch brass pans,	\$0 60
6-inch beam, 2-inch brass pans,	75

Hand Scales.



Somewhat larger than the Pocket Scale, and with larger pans, so that it is adapted to weighing a greater quantity.

Weighs grains, scruples and drams.

6-inch beam, $2\frac{1}{2}$ -inch pans,	\$2 00
9-inch beam, $4\frac{1}{2}$ inch pans,	2 50

Standard Scales.



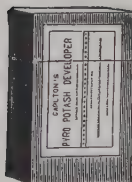
This is the best scale for the varied wants of both professional and amateur photographers.

The entire scale is taken apart and packs in the drawer of the walnut stand.

Price,	-	-	\$4 00
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Carlton's Pyro-Potash Developer.

CONCENTRATED.



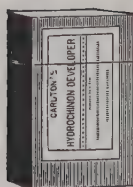
We claim for this developer that more can be done with a plate than almost any developer in the market; the operator has almost perfect control over the plate, and brilliant negatives is the rule.

Put up in two 8-oz. bottles, in card-board box.

Per box, - - - - \$0 60

Carlton's Hydrochinon Developer.

CONCENTRATED.



Will not stain the fingers or plate; gives clear shadows; especially desirable for transparencies.

Can be used over and over again.

Put up in two 8-oz bottles, in card-board box.

Per box, - - - - \$0 50



Carlton's Eikonogen Developer.

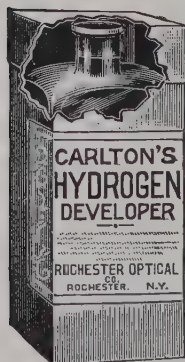
Easy of manipulation, giving brilliant yet soft negatives; especially adapted for portraiture.

Can be used over and over again.

Put up in one 16-oz. bottle.

Price, - - - - \$0 50

Carlton's Hydrogen Developer.



HYDROGEN DEVELOPER is a combination of Hydrochinon and Eikonogen, possessing the good qualities of both. The proportions are so well balanced that the results on any make of plates show the detail and exquisite softness of the Eikonogen, together with the crispness and density of the Hydrochinon.

Hydrogen Developer never becomes thick, and will not stain either the plate or fingers.

Price, 8-oz. bottle, - \$0 30

" 16-oz. " - - 50

" 32-oz. " - - - 90

Carlton's Aristo Solution.

FOR TONING ARISTOTYPE PAPER.

This solution is ready for use and is a combined toning and fixing bath. An 8 oz. bottle of Carlton's Aristo Solution will tone and fix 50 cabinet prints.

8 oz. bottle,	-	-	-	-	-	\$0 40
16 oz. bottle,	-	-	-	-	-	0 75

Carlton's Intensifier.

CONCENTRATED.

Invaluable for strengthening weak negatives.

4 oz. bottle,	-	-	-	-	-	\$0 25
8 oz. " "	-	-	-	-	-	40
16 oz. " "	-	-	-	-	-	75

Carlton's Negative Varnish.

Negatives from which a quantity of prints are to be made should always be varnished to prevent injury to the film.

4 oz. bottle,	-	-	-	-	-	\$0 30
8 oz. " "	-	-	-	-	-	50
16 oz. " "	-	-	-	-	-	75



Cream Paste.

FOR MOUNTING ARISTOTYPE, ALBUMEN OR OTHER PRINTS.

This Paste has strong adhesive qualities, and will be found excellent for Aristotype Paper, which requires a more adhesive Paste than Albumen Paper.

No curling of edges when using this paste. Cream Paste will keep almost indefinitely, and will neither sour nor mould.

One-Quarter Pint Jar,	-	\$0 20	One Pint Jar,	-	-	\$0 35
One-Half Pint Jar,	-	25	One Quart Jar,	-	-	50

Orange or Ruby Fabric.

Convenient for lighting dark rooms.

Price, per piece, 18 inches square, either shade, - - \$0 25

Orange or Ruby Glass.

Correct tints for the dark room.

6 x 8 inches, - - \$0 20	10 x 12 inches, - - \$0 50
7 x 9 " - - - 25	11 x 14 " - - - 60
8 x 10 " - - 30	12 x 15 " - - 75

Orange or Post Paper.

For dark room use.

20 x 24, per sheet, - - - - - - - - \$0 10

Ferrottype Plates.

FERROTTYPE PLATES have a highly polished surface and are used for drying Aristotype or Bromide papers, when it is desired to have a glossy finish without burnishing. Cannot be sent by mail.

10 x 14 inches, each - - \$0 10

Squeegee and Print Roller.

For pressing prints on cards when mounting. A very convenient tool.

6 in. Roll, - - \$1 00 12 in. Roll, - - \$1.50

Burnishers.

We can supply any style or size Burnisher in the market, but list the following from the best now manufactured.

In ordering, state whether oil or gas is to be used for heating.

Victor, 8 inch Roll, - - - - - - - - -	\$10 00
Eureka, 10 inch Roll, - - - - - - - - -	12 50
Improved Rotary, 8 inch Roll, - - - - - - - - -	12 00
Improved Rotary, 10 inch Roll, - - - - - - - - -	15 00
Improved Rotary, 15 inch Roll, - - - - - - - - -	35 00

Dry Plates.

We sell several makes of Dry Plates, among them being Forbes', Cramer's, Seed's, Carbutt's and Stanley's.

3¼ x 4¼, per doz.,	-	\$0 45	8 x 10, per doz.,	-	\$2 40
4 x 5,	"	-	10 x 12,	"	-
4¼ x 6½,	"	-	11 x 14,	"	-
5 x 7,	"	-	14 x 17,	"	double thick,
5 x 8,	"	-	16 x 20,	"	-
6½ x 8½,	"	-	18 x 22,	"	-
3¼ x 4, Transparency Plates, for Lantern Slides, per doz.,	-	65			

Celluloid Films.

FOR USE IN THE FACILE FILM-HOLDERS.

The ease with which the Cut Celluloid Films may be used, the saving in weight, their great compactness and freedom from imperfections, are a few of the advantages claimed for them.

3¼ x 4¼, per doz.,	-	\$0 55	5 x 8, per doz.,	-	\$1 55
4 x 5,	"	-	6½ x 8½,	"	-
4¼ x 6½,	"	-	8 x 10,	"	-
5 x 7,	"	-			

Chemicals.

Hypo-Sulphite Soda, (1 lb. box),	-	-	-	-	each, \$0 10
" " " (5 lb. box),	-	-	-	-	" 40
Pyrogallie Acid,	-	-	-	-	per ounce, 50
Hydrochinon,	-	-	-	-	" " 50
Eikonogen,	-	-	-	-	" " 50
Meta Bisulphite of Potash,	-	-	-	-	" " 35
Carbonate of Soda,	-	-	-	-	per pound, 15
Carbonate of Potash,	-	-	-	-	" " 25
Sulphite of Soda,	-	-	-	-	" " 25
Chloride of Gold (15 grain bottle),	-	-	-	-	each 75
Acetate of Soda (2 oz. bottle),	-	-	-	-	" 20
Bromide Ammonia,	-	-	-	-	per ounce, 15
Sulpho-Cyanide of Ammonia,	-	-	-	-	" " 20
Bi Carbonate of Soda,	-	-	-	-	" " 5
Borax,	-	-	-	-	" " 5
Tungstate of Soda,	-	-	-	-	" " 15
Chloride of Lime,	-	-	-	-	" " 5
Magnesium Powder,	-	-	-	-	" " 50

Aristotype Paper.

ARISTOTYPE PAPER has come largely into use, and has taken the place of Albumen Paper, among both the professional and Amateur photographers. It is exceedingly simple in manipulation, and the results so satisfactory, that we take pleasure in recommending it for all classes of work. Full instructions for use accompany each package.

PRICE LIST.

BRILLIANT AND MATT SURFACE.

	PER DOZEN.	PER ½ GROSS, in one package.	PER GROSS, in one package
3¼ x 4¼ - - -	\$0 20	not furnished,	\$1 60
4 x 5 - - -	25	“ “	2 00
Cabinets, trimmed -	25	“ “	2 00
4 x 6 - - -	25	“ “	2 00
4¼ x 6½ - - -	35	“ “	3 00
5 x 7 - - -	40	\$1 85	3 50
5 x 8 - - -	45	2 10	4 00
6½ x 8½ - - -	65	3 15	6 00
8 x 10 - - -	90	4 20	8 00
18 x 22 Per ½ doz.	\$2 00 4 00	21 00	40 00

Ferro-Prussiate or Blue Paper.

FOR MAKING BLUE AND WHITE PICTURES.

This paper is prepared after an improved formula, and the chemical qualities are perfect.

This paper is coated on Rives' Photographic Paper, same as is used with the best Albumen Paper. Most Ferro-Prussiate Paper is coated on a domestic paper, which is not so fine and smooth.

Put up in light-tight packages of two dozen sheets.

3¼ x 4¼, per package,	\$0 20	5 x 8, per package,	\$0 40
4 x 5, “ “	20	6½ x 8½, “ “	50
4¼ x 6½, “ “	30	8 x 10, “ “	75
5 x 7, “ “	35		

Bromide Paper.

“A”—Smooth surface, thin, for proofs and positive printing.

“B”—Smooth surface, heavy, for positive printing and enlarging.

“C”—Rough surface, heavy, for enlarging and working in crayon.

Price List, “A,” “B” or “C.”

3¼ x 4¼, per dozen,	\$0 25	5 x 8 per dozen,	\$0 75
4 x 5, “ “	40	6½ x 8½, “ “	1 10
4¼ x 6½ “ “	55	8 x 10, “ “	1 50
5 x 7, “ “	65	10 x 12, “ “	2 25

Card Mounts.

Card Mounts are cards on which to place the finished print.

The sizes given are the size of the print, the actual size of the card mount being larger, to allow a margin.

Put up in packages of two dozen each.

When mounts are ordered sent by mail, postage must accompany the order. The amount to add per package for postage on the different sizes is as follows: $3\frac{1}{4} \times 4\frac{1}{4}$, 13 cents; 4×5 , 15 cents; Cabinet, 17 cents; $4\frac{1}{4} \times 6\frac{1}{2}$ and Stereoscopic, 19 cents; 5×7 , 20 cents; 5×8 , 26 cents; $6\frac{1}{2} \times 8\frac{1}{2}$, 37 cents; 8×10 , 45 cents.

No. 1—Plain, assorted colors.

$3\frac{1}{4} \times 4\frac{1}{4}$, per pkg.,	\$0 20
4×5 , " "	20
Cabinet, " "	25
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	30
Stereoscopic, " "	30
5×7 , " "	35
5×8 , " "	40
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	60
8×10 , " "	80

No. 2—Unenameled back and face, assorted colors.

4×5 , per pkg.,	\$0 25
Cabinet, " "	30
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	35
5×7 , " "	45
5×8 , " "	50
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	75
8×10 , " "	I 00

No. 3—Rose tint, with gold beveled edge.

$3\frac{1}{4} \times 4\frac{1}{4}$, per pkg.,	\$0 30
4×5 , " "	30
Cabinet, " "	35
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	40
Stereoscopic, " "	40
5×7 , " "	55
5×8 , " "	60
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	80
8×10 , " "	I 00

No. 4—Gray, with wide border, for framing.

4×5 , per pkg.,	\$0 45
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	50
5×8 , " "	65
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	80
8×10 , " "	I 00

No. 5—Amber, unenameled, with gold beveled edge.

$3\frac{1}{4} \times 4\frac{1}{4}$, per pkg.,	\$0 40
4×5 , " "	40
Cabinet, " "	45
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	50
Stereoscopic, " "	50
5×7 , " "	60
5×8 , " "	65
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	I 00
8×10 , " "	I 40

No. 6—Bottle Green, with gold beveled edge.

4×5 , per pkg.,	\$0 50
Cabinet, " "	60
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	70
5×7 , " "	85
5×8 , " "	90
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	I 20
8×10 , " "	I 75

No. 7—Maroon face, gray back, with gold beveled edge.

4×5 , per pkg.,	\$0 50
Cabinet, " "	60
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	70
5×7 , " "	85
5×8 , " "	90
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	I 20
8×10 , " "	I 75

No. 8—Chocolate, with wide border for framing.

4×5 , per pkg.,	\$0 50
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	60
5×8 , " "	80
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	I 00
8×10 , " "	I 20

Extra Parts of Apparatus.

Including Holder Slides, Front Boards, Ground-Glass, Tripod Screws,
Bellows, Carrying Cases, etc.

SIZE.	Regular Holder Slides.	Hard Rubber Holder Slides.	Front Boards, for Model Cameras.	Front Boards, for Imp. Model, Peerless and Standard.	Front Boards, for Universal and Ideal.	Front Board, and Division for Stereo. Work.	Ground-Glass, for Focusing Screen.	Tripod Screws.	Bed Plates, for Cameras.	Square Bellows, for Model and Imp. Model.	Cone Bellows, for Ideal and Standard.	Long Cone Bellows, for Universal.	Cauvas Cases, for Camera and Two Holders.	Long Canvas Case, for Universal, Six Holders and Tripod.
3¼ x 4¼	\$0 15	\$0 25	\$0 25	\$0 40	\$0 50	\$0 50	\$0 12	\$0 30	\$0 50	\$2 00	\$3 50	\$4 00	\$2 25	\$3 00
4 x 5	15	25	25	40	50	50	12	30	50	2 00	3 50	4 00	2 25	3 00
4¼ x 6½	20	30	25	40	50	50	15	30	50	2 00	3 75	4 25	2 50	3 25
5 x 7	20	35	25	40	50	50	18	30	50	2 00	4 00	4 50	2 50	3 50
5 x 8	20	35	25	40	50	50	18	30	50	2 00	4 00	4 50	2 75	3 50
6½ x 8½	25	45	25	40	50	75	20	30	50	2 25	4 50	5 00	3 00	3 75
8 x 10	30	50	25	40	50	75	25	30	50	2 50	5 00	5 50	3 25	4 00
10 x 12	45	80			60		35	40	50					
11 x 14		1 25			60		65	50	50					
14 x 17		2 00			75		80	55	50					

Caps for R. O. Co.'s Single View Lenses, each,	-	-	\$0 25
“ “ “ Excelsior “ “	-	-	40
Diaphragms, for Excelsior Lenses, per set,	-	-	75
Morocco Case, for Diaphragms for Excelsior Lens,	-	-	50
Flanges, for R. O. Co.'s Single View Lens,	-	-	50
“ “ “ Excelsior Lens,	-	-	75
Spring-catch, for holding Holder on New Model, each,	-	-	25
Tripod Head, for Standard Tripod,	-	-	50
Wood Head, for Combination Tripod,	-	-	50
Reversing Attachment, for New Model,	-	-	50
Clamp-Hooks, for holding Folding Bed rigid,	-	-	25
Clamp and Screw, for leg of Sliding Tripod,	-	-	50
Milled Heads, with Screw, for various uses,	-	-	25
“ “ without “ “ “ “	-	-	20
Ruby Glass, for Universal Lantern,	-	-	10
Ruby or Orange Glass, for Ideal Lantern,	-	-	15
Ruby or Orange Glass, for Carlton Lantern,	-	-	15
Ruby Chimney, for Gem Lantern,	-	-	25
Corner Plates, for Ground-Glass, each,	-	-	10

Chemical Outfit.

FOR PRODUCING THE NEGATIVE.

The chemicals and articles which should accompany any of our cameras, and with which the picture is made, consist of the following articles, arranged in sizes according to the size of camera used: Two Japanned Tin Developing Trays; one dozen Dry Plates; one 4-ounce Graduated Glass; one box Carlton Hydrogen Developer; one 1-pound box Hypo-Soda; one Universal Ruby Lantern; one copy *Amateur Photographer*; one Gossamer Focusing Cloth.

Above arranged for

3 $\frac{1}{4}$ x 4 $\frac{1}{4}$ camera,	-	\$3 40	5 x 8 camera,	-	\$4 25
4 x 5 "	-	3 50	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$ "	-	4 75
4 $\frac{1}{4}$ x 6 $\frac{1}{2}$ "	-	3 90	8 x 10 "	-	5 75
5 x 7 "	-	4 20			

Printing Outfit.

FOR PRINTING, TONING AND FINISHING THE PICTURE.

One Printing Frame; one dozen Aristotype Paper; one bottle Carlton's Aristo Toning Solution; one package Card Mounts; one quarter pint jar Cream Paste.

Above arranged for

3 $\frac{1}{4}$ x 4 $\frac{1}{4}$ camera,	-	\$1 25	5 x 8 camera,	-	\$2 00
4 x 5 "	-	1 25	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$ "	-	2 50
4 $\frac{1}{4}$ x 6 $\frac{1}{2}$ "	-	1 50	8 x 10 "	-	3 50
5 x 7 "	-	1 75			

To Amateurs.

We omit the usual "Outfit Department," which we deem unnecessary, as our cameras are complete with the exception of the Carlton, Universal, Monitor, Kenwood, Ideal, Empire State, Standard, and 8 x 10 New Model and New Model Improved, which we list in this way for the reason that most people who buy the best class of cameras, and especially the larger sizes, prefer one of the higher grade of lenses, and many people, especially professionals, have one or more lenses or tripods, and wish only the camera without these articles.

Should you select one of these cameras, you have only to add price of lens and tripod selected, which makes the camera complete.

To the price of the complete camera add the price of the Chemical and Printing Outfits, corresponding to the size of camera selected, which will be *everything necessary* to take pictures.

R. O. Co.'s Single View Lens.

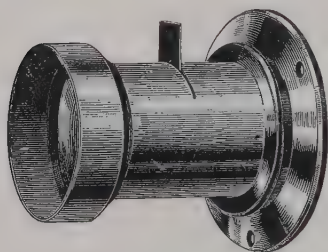
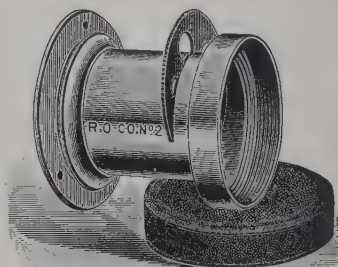
These Lenses are conceded to be the best of the low priced lenses, giving a wonderful definition, with great depth of focus and flatness of field, especially when using the smaller diaphragms. They are perfectly achromatic, and are as near rectilinear as is possible in a Single Combination Lens, and are quick working.

These Lenses are furnished with *Rotating Diaphragms*, having four apertures, and are very convenient to use; the largest aperture is large enough for instantaneous views.

Though designed for landscape work, they will make excellent groups, and even portraits.

NO.	LENGTH OF FOCUS.	SIZE.	PRICE.
1	6 inch,	4 x 5,	\$3 00
1½	8 "	4¼ x 6½,	3 50
2	10 "	5 x 8,	4 00
3	11 "	6½ x 8½,	5 00
4	13 "	8 x 10,	7 00

No. 1, furnished in matched pairs, for stereoscopic work, at \$6 00.



R. O. Co.'s Excelsior Lens.

RAPID RECTILINEAR.

The EXCELSIOR LENS was made to meet the wants of the amateur who desires a better lens than our Single View Lens, and yet at a moderate outlay, and it has acquired a popularity quite beyond our expectations. We confidently think they are the best value of any lens, and are equal to many lenses at a much higher price.

They are perfectly rectilinear, have great depth of focus and flatness of field, giving brilliant definition; they will be found excellent for landscapes, architectural subjects and instantaneous work, as well as groups and portraits. Fitted with Waterhouse Stops or Iris Diaphragms.

NO.	LENGTH OF FOCUS.	SIZE.	PRICE.	
			WATERHOUSE STOPS.	IRIS DIAPHRAGMS.
1	6½ inch,	4 x 5	\$10 00	\$15 00
2	9 "	5 x 8	12 00	17 25
3	11 "	6½ x 8½	15 00	20 50
4	13 "	8 x 10	20 00	26 50
5	16 "	10 x 12	30 00	38 00
6	20 "	12 x 15	45 00	54 00

Rapid Rectilinear Lenses.

The following are among the best known lenses of the Rapid Rectilinear series.

The Zeiss Anastigmat Lenses.

Among the advantages claimed for these Lenses are extreme flatness of field, absolute uniformity of illumination, unusual depth of focus and freedom from astigmatism.

SERIES II.—1:6.3.

EXTREMELY RAPID INSTANTANEOUS LENS, ALSO FOR PORTRAITS, GROUPS AND COPYING.

This Series is remarkable for its perfect anastigmatic flatness of field and its great rapidity. These Lenses are particularly suitable for the universal purposes of the amateur and professional.

No.	Size of Plate covered with Stop <i>f.</i> 9.	Diameter of Image Circle at 80°.	Free Diameter of Largest Lens.	Equivalent Focus.	Price.
2	3¼ x 4¼	6½	¾	4½	\$ 31 00
3	4 x 5	9¼	1	5½	38 00
4	4¼ x 6½	11¾	1¼	6½	47 00
5	5 x 7	13¾	1⅞	8¼	60 00
6	5 x 8	16½	1⅞	9½	73 00
7	6½ x 8½	19½	2	11½	101 00
8	8 x 10	23½	2¾	14½	140 00

SERIES II a.—1:8.

FOR PORTRAITS, GROUPS, INSTANTANEOUS OUT-DOOR WORK AND COPYING.

The Lenses of this Series combine all the desirable qualities of the Series IIIa with a greater speed. The angle, however, is somewhat reduced, being 80°.

No.	Size of Plate covered with Stop <i>f.</i> 12.5.	Diameter of Image Circle at 72°.	Free Diameter of Largest Lens.	Equivalent Focus.	Price.
1	4 x 5	6¾	⅝	4¾	\$28 00
2	4¼ x 6½	8¼	¾	5¾	31 00
3	5 x 8	10½	1	6½	41 00
4	6½ x 8½	12¾	1⅞	8	51 00
5	8 x 10	14¾	1⅞	9¾	60 00
6	10 x 12	17¾	1⅞	11¾	80 00

SERIES III.—1:7.2.

FOR INSTANTANEOUS WORK, STUDIO WORK ON GROUPS AND LARGE HEADS, OUT-DOOR WORK OF ALL KINDS AND COPYING.

The lenses of this series have an angular aperture from 85° to 90°, and can therefore be used as wide angle lenses if desired. They are intended for use in all classes of photographic work, and have a speed greater than almost all rapid lenses now in the market.

No.	Size of Plate covered with Stop <i>f.</i> 12.5	Diameter of Image Circle at 80°.	Free Diameter of Largest Lens.	Equivalent Focus.	Price.
1	3¼ x 4¼	6⅝ in.	⅝ in.	3⅞ in.	\$ 23 00
2	4 x 5	7⅞ "	¾ "	4¾ "	26 00
3	4¼ x 6½	9⅞ "	1 "	5⅞ "	30 00
4	5 x 7	13 "	1¼ "	7⅞ "	39 00
5	5 x 8	14⅞ "	1⅞ "	8⅞ "	49 00
6	6½ x 8½	16⅞ "	1⅞ "	9⅞ "	59 00
7	8 x 10	20⅞ "	2 "	12⅞ "	78 00

Zeiss Anastigmat Lenses.

SERIES III a. 1:9.

INSTANTANEOUS OUT-DOOR LENS, ALSO FOR GROUPS AND LARGE PORTRAITS.

The lenses of this series have an angular aperture of 90°, and are adapted for all kinds of instantaneous work, also for groups, portraits, architectural subjects, etc. They are particularly adapted to Hand Cameras, though where very quick exposures are desired the Series II or IIa should be selected.

No.	Size of Plate covered with Stop <i>f</i> 12.5.	Diameter of Image Circle at 90°.	Free Diameter of Largest Lens	Equivalent Focus.	Price.
00	3¼ x 4¼ in.		½	3¼ in.	\$ 20 00
1	4 x 5 "	9 7/8 in.	5/8	4¾ "	21 00
2	4¼ x 6½ "	11 1/8 "	¾	5½ "	25 00
3	5 x 7 "	13 1/8 "	7/8	6¾ "	30 00
4	5 x 8 "	15 1/8 "	1	7 1/8 "	33 00
5	6½ x 8½ "	18 7/8 "	1¼	9 1/8 "	43 00
6	7 x 9 "	21 1/8 "	1 7/8	10¾ "	52 00
7	8 x 10 "	25 "	1 5/8	12½ "	65 00
8	10 x 12 "	32 "	2	16 "	98 00
9	11 x 14 "	39¾ "	2 7/8	19 7/8 "	130 00

SERIES IV. 1:12.5.

AN INSTANTANEOUS WIDE ANGLE LENS, FOR LANDSCAPES, INTERIORS, ARCHITECTURE AND COPYING.

The Lenses of this series have an angle of 100° and are therefore wide angle, and as such may be used for all out-door work with full aperture, which has unusual value in a large variety of work.

No.	Size of Plate covered with Stop <i>f</i> 18.	Diameter of Image Circle at 96°.	Free Diameter of Largest Lens	Equivalent Focus.	Price.
1	3¼ x 4¼ in.	5¼ in.	¼ in.	2 7/8 in.	\$17 00
2	4 x 5 "	8 1/8 "	3/8 "	3 7/8 "	17 00
3	4¼ x 6½ "	10 3/8 "	½ "	4 1/8 "	20 00
4	5 x 8 "	13 3/8 "	5/8 "	6 1/8 "	23 00
5	8 x 10 "	17 5/8 "	1 1/8 "	7 1/8 "	30 00
6	10 x 12 "	22 3/8 "	1 7/8 "	10 1/4 "	44 00

SERIES V. 1:18.

WIDE ANGLE LENS PAR EXCELLENCE, FOR INTERIORS, ARCHITECTURE, COPYING AND LANDSCAPES.

This series is a Wide Angle lens proper, having an angle of 108°, notwithstanding which it is available for instantaneous work with sunlight illumination.

No.	Size of Plate covered with Stop <i>f</i> 36.	Diag of Largest Pla. Cov with Sm Stop 104°-110°.	Free Diameter of Largest Lens.	Equivalent Focus.	Price
1	4¼ x 6½ in.	8 1/8 in.	9/8 in.	3¾ in.	\$21 00
2	5 x 7 "	11 "	3/8 "	4¾ "	21 00
3	6½ x 8½ "	14 3/8 "	½ "	5 1/8 "	26 00
4	8 x 10 "	15¾ "	9/8 "	7 1/8 "	33 00
5	10 x 12 "	21 1/4 "	1 1/8 "	8¾ "	41 00
6	11 x 14 "	26¾ "	1 3/8 "	10 7/8 "	51 00

Darlot Rapid Hemispherical Lens.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
1	5½ inches,	4 x 5	\$13 50
2	9 “	5 x 8	20 00
3	10½ “	8 x 10	30 00
4	14 “	11 x 14	45 00

Beck's "Autograph" Rapid Rectilinear Lens.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
2	7 inches,	4 x 5	\$30 00
3	9 “	5 x 8	35 00
4	11 “	6½ x 8½	50 00
5	13 “	8 x 10	60 00
6	16 “	10 x 12	75 00

Beck's "Autograph" Rapid Rectilinear Lens.

SERIES "B."

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE
1	5 inches,	3¼ x 4¼	\$18 00
2	7 “	4 x 5	18 75
3	8¾ “	5 x 8	22 50
4	11 “	6½ x 8½	34 00
5	13 “	8 x 10	44 00

Bausch & Lomb Optical Co.'s "Universal."

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE
1	5¾ inches,	4 x 5	\$22 00
2	7¾ “	5 x 8	26 00
3	10¾ “	6½ x 8½	35 00
4	12¼ “	8 x 10	48 00
5	15 “	10 x 12	60 00

Alvin G. Clark Lenses.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
1	5¾ inches,	4 x 5	\$24 00
2	7¾ “	5 x 8	30 00
3	10¾ “	6½ x 8½	38 00
4	12¼ “	8 x 10	50 00
5	15 “	10 x 12	64 00

Gundlach's Rapid Rectigraphic Lens.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
1	6 $\frac{1}{4}$ inches,	4 x 5	\$20 00
2	8 $\frac{1}{2}$ "	5 x 8	30 00
3	11 "	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	38 00
4	13 "	8 x 10	50 00
5	16 "	10 x 12	64 00
6	18 $\frac{1}{2}$ "	11 x 14	76 00

Voigtlaender's Euryscope.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
0	4 $\frac{1}{2}$ inches,	4 x 5	\$27 00
1	8 "	5 x 8	45 00
2	10 "	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	52 00
3	11 $\frac{1}{2}$ "	8 x 10	65 00
5	14 "	11 x 14	87 00

The Suter Aplanatic Lens.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
2	6 $\frac{3}{4}$ inches,	4 x 5	\$28 00
3	8 $\frac{3}{4}$ "	5 x 8	30 00
4	10 $\frac{1}{4}$ "	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	40 00
5	14 $\frac{1}{4}$ "	8 x 10	50 00

Ross' Rapid Symmetrical Lens.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
1	6 inches,	4 x 5	\$25 00
2	9 "	5 x 8	35 00
3	10 $\frac{1}{2}$ "	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	40 00
4	14 "	8 x 10	53 00
5	16 "	10 x 12	64 00

Ross' Portable Symmetrical Lens.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
3	5 inches,	4 x 5	\$21 50
4	6 "	5 x 7	23 50
6	8 "	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	36 50
8	10 "	8 x 10	50 00

Wide Angle Lenses.

Wide Angle Lenses are used mostly for street views, architectural effects in confined situations and interiors, embracing as they do an angle of from 90 to 100 degrees, they admit of being much nearer to the object photographed. They are not so quick working as those of ordinary angles. The principal objection to their more general use is that on account of the great width of angle, the perspective is exaggerated, objects in the foreground being unduly magnified.

Excelsior Wide Angle Lens.

The Excelsior Wide Angle Lenses will be found as valuable for the character of work for which they are designed as our well known and popular Rapid Rectilinear Series. They are adapted for interiors, buildings, landscapes, and all work in confined situations, where lenses of longer focus cannot well be used. All Wide Angle Excelsior Lenses have Rotating Diaphragms.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
1	3½ inches,	4 x 5	\$10 00
2	5 "	5 x 8	15 00
3	6½ "	6½ x 8½	18 00
4	8 "	8 x 10	22 00

Darlot's Wide Angle Hemispherical.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
2	3 inches,	4 x 5	\$15 00
2½	4 "	5 x 7	15 00
3	5 "	6½ x 8½	20 00
4	8 "	8 x 10	25 00

Beck's "Autograph" Wide Angle.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
1	3 inches,	4 x 5	\$25 00
2	4 "	5 x 8	30 00
3	5 "	6½ x 8½	37 50
4	7 "	8 x 10	50 00

Euryscope Wide Angle.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
1	4 inches,	4 x 5	\$27 00
2	5 "	5 x 8	29 00
3	6 "	6½ x 8½	34 00
4	7 "	8 x 10	39 00

NOTICE.

WHEN ORDERING.

Cameras—Give size, style, and if a regular tripod Camera, state whether single or double swing is desired.

Plate Holders—Give size, and name the Camera they are to fit. The same Holder will fit New Model, and New Model Improved Cameras. The Holder for these Cameras has rabbet, and holes at bottom and pin at top.

The same Holder will fit the Carlton, Universal, Ideal, Empire State and Standard. These Holders are without rabbet, merely a cleat at shutter end.

The same Holder fits the Monitor and Kenwood Cameras. It is also without rabbet, having a cleat at the end.

The same Holder fits Premier, Folding Premier and Handy. These Holders are without rabbet; the slide draws from the *side* of Holder.

The same Holder fits all Premo Cameras, as well as the Premaret, Carlton Twin Lens, and Midget.

Drop Shutters—If the opening for lens is to be cut, the best method of securing the proper size of hood, is to make an impression of the same on paper. This is readily accomplished by placing the sheet of paper on the end of the lens and pressing on same with the palm of the hand; this will leave an impression of the lens. We can insure a closer fit by this simple method than is possible to obtain when the diameter of hood only is given.

Fitting Special Lenses to Hand Cameras.

An especial advantage possessed by many of our Hand Cameras, is the fact that almost any lens in the market can be adapted to them. Many amateur and professional photographers have preference for some particular make or style of lens, and while it is not imperative that the camera be sent to the factory for the purpose of fitting such lenses, yet whenever possible we would advise our friends to return the instrument to us. We can then re-mark the focusing dial, and have every detail absolutely correct.

*Special 1972 Reprint Edition
Classic Photographic Apparatus
Simsbury, Connecticut*

